Exercise 7

Operations on decimal numbers

From the school book

1 Find the result of each of the following :

a
$$\begin{array}{r} 0.231 \\ +\ 0.754 \\ \hline \end{array}$$
.....

b
$$\begin{array}{r} 2.53 \\ +\ 0.19 \\ \hline \end{array}$$
.....

c
$$\begin{array}{r} 0.689 \\ -\ 0.254 \\ \hline \end{array}$$
.....

d 📖
$$\begin{array}{r} 3218.975 \\ -\ 218.853 \\ \hline \end{array}$$
.....

e
$$\begin{array}{r} 12.2 \\ +\ 21.6 \\ \hline \end{array}$$
.....

f 📖
$$\begin{array}{r} 74.28 \\ +\ 25.72 \\ \hline \end{array}$$
.....

g
$$\begin{array}{r} 53.42 \\ -\ 21.23 \\ \hline \end{array}$$
.....

h
$$\begin{array}{r} 16.34 \\ +\ 8.79 \\ \hline \end{array}$$
.....

i
$$\begin{array}{r} 7.51 \\ +\ 6.492 \\ \hline \end{array}$$
.....

j 📖
$$\begin{array}{r} 666.66 \\ -\ 549.958 \\ \hline \end{array}$$
.....

k 📖
$$\begin{array}{r} 967.63 \\ +\ 91.2 \\ \hline \end{array}$$
.....

l
$$\begin{array}{r} 92.07 \\ -\ 45.026 \\ \hline \end{array}$$
.....

m
$$\begin{array}{r} 0.2 \\ +\ 0.987 \\ \hline \end{array}$$
.....

n 📖
$$\begin{array}{r} 289.007 \\ +\ 14.43 \\ \hline \end{array}$$
.....

o
$$\begin{array}{r} 68.005 \\ -\ 24.25 \\ \hline \end{array}$$
.....

p
$$\begin{array}{r} 0.5 \\ -\ 0.375 \\ \hline \end{array}$$
.....

q
$$\begin{array}{r} 612.5 \\ -\ 157.125 \\ \hline \end{array}$$
.....

r
$$\begin{array}{r} 35.001 \\ +\ 14.999 \\ \hline \end{array}$$
.....

Lesson 7

s

$$\begin{array}{r} 8.974 \\ +\ 1.237 \\ \hline \end{array}$$

.....

t

$$\begin{array}{r} 36.752 \\ -\ 8.491 \\ \hline \end{array}$$

.....

u

$$\begin{array}{r} 72.1 \\ -\ 9.865 \\ \hline \end{array}$$

.....

v

$$\begin{array}{r} 27.34 \\ -\ 9 \\ \hline \end{array}$$

.....

w

$$\begin{array}{r} 87 \\ -\ 6.319 \\ \hline \end{array}$$

.....

x

$$\begin{array}{r} 4.15 \\ +\ 8.6 \\ +\ 9.283 \\ \hline \end{array}$$

.....

y

$$\begin{array}{r} 115.402 \\ +\ 803.1 \\ +\ 27.86 \\ \hline \end{array}$$

.....

z

$$\begin{array}{r} 21.4 \\ +\ 87.8 \\ +\ 30.934 \\ \hline \end{array}$$

.....

2 **Find the result of each of the following :**

a 14.63 + 34.25 = ...

b 📖 17.3 + 4.6 = ...

c 2.536 – 1.203 = ...

d 0.875 + 0.43 = ...

e 📖 2.65 + 9.3 = ...

f 89.75 – 4.34 = ...

g 2.536 – 0.203 = ...

h 5.42 – 3.362 = ...

i 72.7 + 65.31 = ...

j 381.5 + 76.53 = ...

k 14.78 – 2.5 = ...

l 30.33 – 3.3 = ...

m 7.7 + 8.005 = ...

n 22.3 – 11.415 = ...

o 271.306 + 3.5 = ...

p 205.7 – 99.103 = ...

q 📖 1.007 + 9 = ...

r 📖 13 + 2.65 = ...

s 48.005 – 24.25 = ...

t 100 – 47.85 = ...

u 17.007 – 12.07 = ...

v 213.01 + 27.99 = ...

w $11\frac{1}{4}$ + 12.179 = ...

x $\frac{1}{8}$ + 0.13 = ...

y $9\frac{113}{1\,000} - 7\frac{1}{4}$ = ...

z $36\frac{2}{5}$ – 17.15 = ...

3 Find the result of each of the following :

a 87 ÷ 10 = ...

b 420 ÷ 10 = ...

c 489 ÷ 10 = ...

d 754 ÷ 100 = ...

e 7 521 ÷ 1 000 = ...

f 6 280 ÷ 100 = ...

g 7 001 ÷ 10 = ...

h 99 675 ÷ 1 000 = ...

i 583 001 ÷ 100 = ...

j 6 104 826 ÷ 10 = ...

k 4 250 ÷ 1 000 = ...

l 7 800 ÷ 1 000 = ...

m 425 000 ÷ 1 000 = ...

n 777 600 ÷ 100 = ...

4 Find the result of each of the following :

a 37.42 + 43.01 + 19.15 = ...

b 28.65 + 17.3 + 2.05 = ...

c 51.7 + 48.004 + 48.59 = ...

d 6 + 3.65 + 4.912 = ...

e 53.245 + 1.97 + 213.8 = ...

f 2.009 + 3.091 + 4.91 = ...

g 900.333 + 90.222 + 9.445 = ...

h 12.7 + 10.007 + 3.07 = ...

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i $5.27 + 8.39 - 3\frac{14}{100} =$ .....

j 📖 $512 + 88.35 - 67.035 =$ .....

k 📖 $(24.235 + 0.065) - (17 + 1.3) =$ .....

l $(32.57 - 12.32) + (75.6 - 12.48) =$ .....

m 📖 $(520.46 - 2.731) - (498.7 - 98.58) =$ .....

n 📖 $(83.57 - 14.451) + (218.6 - 100.58) =$ .....

o 📖 $(23\,456 \div 10) + (23\,456 \div 100) =$ .....

p $11.35 - (5.6 + 4.5) - (75 \div 1\,000) =$ .....

q $39.071 - \left(16\frac{1}{4} + 22\frac{1}{5}\right) =$ .....

---

5 Complete :

a $1.6 +$ ..... $= 9.6$

b ..... $+ 3.9 = 6.5$

c $36.47 +$ ..... $= 52.03$

d 📖 ..... $+ 54.8 = 77.59$

e ..... $+ 125.125 = 200.5$

f 📖 $47.85 +$ ..... $= 100$

g $6.27 -$ ..... $= 3.286$

h ..... $- 3\frac{3}{5} = 7.634$

i 📖 $33.3 -$ ..... $= 12.008$

j 📖 ..... $- 41.41 = 3.8$

k ..... $- 43.792 = 61.379$

l $4\,453 \div$ ..... $= 44.53$

m ..... $\div 1\,000 = 67\frac{2}{10}$

n $4.76 = 4 + 0.7 +$ .....

o $5\,028 \div$ ..... $= 50.28$

p $12 \div$ ..... $= 0.012$

6 Choose the correct answer :

a 5.4 + 3.04 = ... (84.4 or 8.44 or 0.844)

b 📖 4.7 + 3.07 = ... (7.14 or 8.4 or 7.77)

c 0.04 + 0.4 = ... (0.44 or 0.08 or 0.008)

d 361 ÷ 100 = ... (36.1 or 3.61 or 36 100)

e 📖 9 870 ÷ 100 = ... (98.7 or 9.87 or 987)

f 4.619 – 3.7 = ... (0.999 or 0.199 or 0.919)

g 📖 137.234 – 37.04 = ... (133.530 or 100.194 or 100.230)

h 3 + 0.3 + 0.003 = ... (3.33 or 3.303 or 0.333)

i 2.714 + ... = 5 (2.286 or 22.86 or 2.276)

j ..... ÷ 100 = 0.6 (0.06 or 0.6 or 60)

k 140 ÷ 1 000 = ... (14 or 1.4 or 0.14)

l 📖 540 piasters = ... pounds (5.4 or 54 or 0.54)

m 2 356 gm. = ... kg. (23.56 or 2.356 or 235.6)

n $\frac{1}{8}$ + 4.125 = ... (4.25 or 0.45 or 0.045)

o 📖 256.104 = 256 + 0.1 + ... (0.04 or 0.4 or 0.004)

p $3.8 + 4\frac{1}{2}$ ..... 8.3 (< or = or >)

q $13 - 3\frac{2}{5}$ = ... (9.6 or 9.4 or 9)

---

7 Put the suitable relation (< , = or >) :

a 1.7 + 0.7 ☐ 3 + 0.5

b 📖 7.9 + 2.3 ☐ 11.7 – 1.3

c 0.5 + 0.99 ☐ 0.99 + 5

d 3.1 + 4.18 ☐ 9.5 – 4.32

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e 1.471 – 0.53 ☐ 0.951

f 1.54 ☐ 154 ÷ 10

g 7.32 – 1.93 ☐ 6.78 – 0.42

h 7.44 dm^2 ☐ 744 cm^2

i 614 gm. ☐ 6.14 kg.

j 📖 58.003 – 57.03 ☐ 1 + 0.973

k 📖 99.89 – 90.09 ☐ 10 – 1.01

l 📖 520.46 + 0.73 ☐ 520 + 1.19

m $25\frac{3}{5}$ – 19.15 ☐ 6.45

n 📖 4.722 ☐ 8 – 3.228

o 📖 6.18 + 3.82 ☐ 87.56 – 77.5

p 📖 175 ÷ 100 ☐ 175 ÷ 1 000

q 📖 1.75 ☐ $1\frac{3}{4}$

r 📖 785 ÷ 10 ☐ 8 000 ÷ 100

s 324.007 + 25.06 ☐ 75.78 + 275.1

t 25.25 + 25 ☐ 50.75 – (25 ÷ 100)

---

8 Put (✓) for the correct statements and (×) for the incorrect ones :

a 5 604 ÷ 100 = 5.604 ( )

b 4.761 – 3.009 = 1.752 ( )

c 7.641 + 3.942 = 1.1583 ( )

d 📖 4.256 + 4.4 = 8.260 ( )

e 📖 19.07 – 8.007 = 7.063 ( )

f 1.07 + 0.7 = 1.77 ( )

g 📖 4.075 = 4 + 0.7 + 0.005 ( )

h $64 \div 1\,000 = 0.64$ ( )

i $0.1 + 0.001 + 0.01 = 0.111$ ( )

j $2\frac{1}{8} + 7.875 = 10$ ( )

k $8.8 - 8.08 =$ zero ( )

l $18.007 - 15.7 = 3$ ( )

m $36.4 - 22.25 = 14.15$ ( )

n $3.71 + 6.92 = 10.33$ ( )

o $63 - 19.42 = 54.78$ ( )

p $9.63 + 1.94 > 10.5$ ( )

q $4\frac{3}{4}$ pounds = 475 piastres ( )

r 8 thousandths + 3 tenths = 0.38 ( )

s $\frac{1}{2} + 0.05 = 1$ ( )

9 Complete the missing digits :

a

	3	.	□	7
+	6	.	5	□
	□	.	8	9

b

	1	.	□	6
+	3	.	3	□
	□	.	3	3

c

	3	.	2	□
+	5	.	□	3
	□	.	7	3

d

	9	7	.	4	8
+	4	3	.	□	□
	□	□	□	.	9	3

e

	3	4	.	4	2
+	□	□	.	□	□
	9	4	.	6	5

f

	2	5	.	4	8	6
−	□	□	.	□	□	□
	1	2	.	1	3	0

Lesson 7

g

$$\begin{array}{r} 5.69 \\ -\ 4.\square\square \\ \hline \square.45 \end{array}$$

h

$$\begin{array}{r} 9.51\square \\ -\ \square.\square\square 1 \\ \hline 4.242 \end{array}$$

i

$$\begin{array}{r} 83.57 \\ -\ \square\square.734 \\ \hline 24.\square\square\square \end{array}$$

j

$$\begin{array}{r} 113.57\square \\ -\ \ 13.\square\square 8 \\ \hline \square\square\square.17\square \end{array}$$

k

$$\begin{array}{r} 5.\square 8\square \\ -\ 1.413 \\ \hline \square.3\square 7 \end{array}$$

l

$$\begin{array}{r} 299.\square\square\square \\ -\ \ \square\square.457 \\ \hline 243.\square 3\square \end{array}$$

Real Life Problems

Example

Soha saved L.E. 17.25 and her brother Amgad saved L.E 8.5
Find the sum they saved.

The sum they saved = 17.25 + 8.5
= L.E. 25.75

a Hany bought a pair of trousers for L.E. 75.75 and a pair of shoes for L.E. 49.5
How much money did Hany pay ?

What Hany paid = ... + ...
= L.E. .....

b If Mona has L.E. 3.95 and Manal has L.E. 6.3

How much do they have together ?

.....

c A man bought some goods for L.E. 306.7

and sold them for L.E. 366.95 Find his profit.

.....

d Ibrahim had L.E. 53.75 He spent L.E. 35.05

Find the remainder with him.

.....

.....

.....

.....

e Mai had L.E. 253 She bought a dress for

L.E. 125.7 and some books for L.E. 37.95

How much money is left with her ?

.....

.....

f 🕮 Mazen has 35 pounds. He bought a ball

for L.E. 9.75 and a book for P.T. 840

How much money was left with Mazen?

.....

.....

Lesson 7

g Ali has L.E. 24.75 and Ahmed has L.E. $15\frac{1}{4}$

Find how much money Ali and Ahmed have together.

.....

.....

h 📖 Hossam has P.T. 425 and his sister Hend has P.T. 980 piastres.Find the difference between what they have in pounds.

.....

i 📖 Hanaa has 200 pounds. She wants to buy a pair of shoes for L.E. 99.8 , a bag for L.E. 45.75 and a dress for L.E. 70.25

Can she buy all what she wants ? Why ?

.....

.....

j 📖 A man bought three metres of cloth to make two shirts, one for him and another for his son. If you know that one metre and three quarters of a metre of cloth are needed for the man's shirt and one metre and half a metre for the son's shirt, answer the following questions :

a. Is what the man bought enough to make the two shirts or will he need another piece of cloth ?

.....

b. If he needs another piece of cloth, how much cloth will he need to buy ?

.....

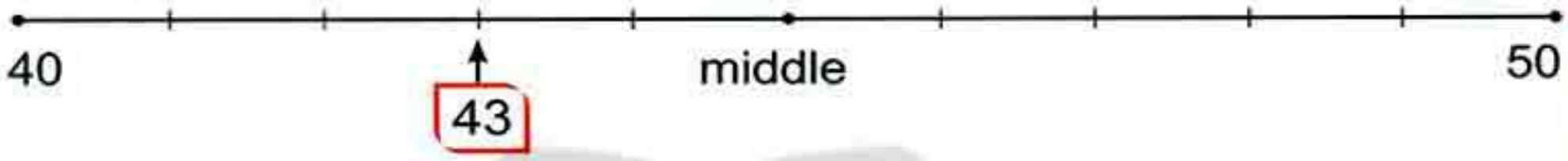
Exercise 8

Approximating to the nearest ten

From the school book

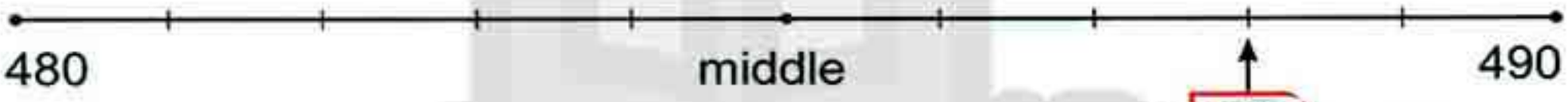
1 Notice the position of each of the following numbers on the number line, then complete as in the example :

Example



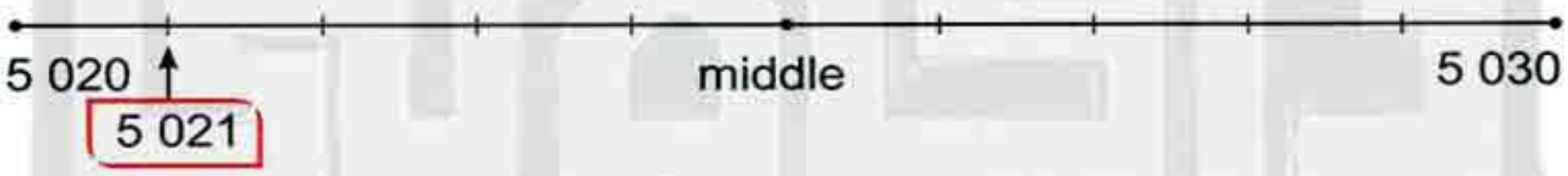
43 ≃ 40 to the nearest ten.

a



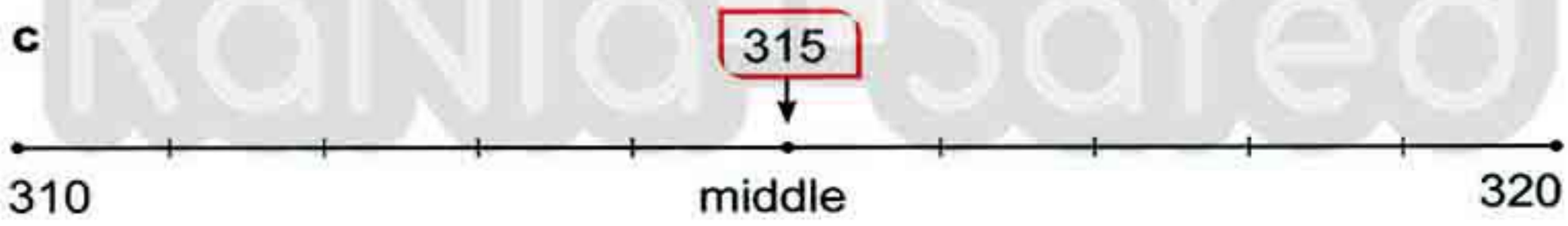
488 ≃ ..... to the nearest ten.

b



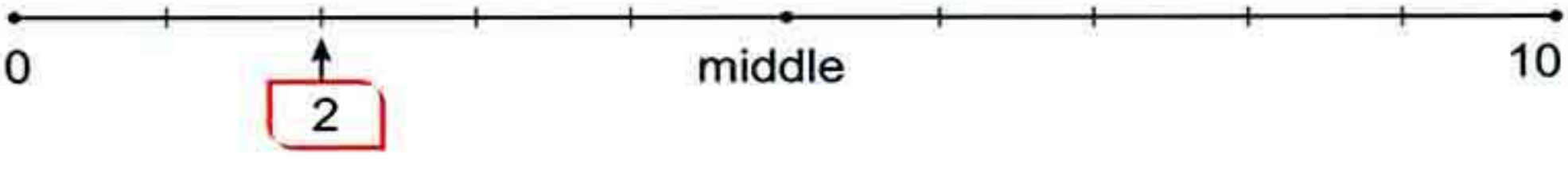
5 021 ≃ ..... to the nearest ten.

c



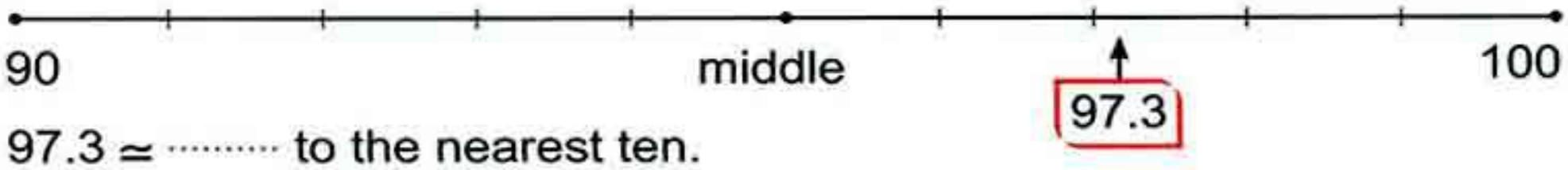
315 ≃ ..... to the nearest ten.

d



2 ≃ ..... to the nearest ten.

e



97.3 ≃ ..... to the nearest ten.

2 **Approximate each of the following numbers to the nearest 10 as in (a) :**

a 514 ≃ 510 **b** 86 029 ≃ ..... **c** 85 ≃ .....

d 33.105 ≃ ..... **e** 5.009 ≃ ..... **f** 108 ≃ .....

g 17.5 ≃ ..... **h** 218.16 ≃ ..... **i** 2 008 ≃ .....

j 997 ≃ ..... **k** 6.7 ≃ ..... **l** 0.99 ≃ .....

m 9 999 ≃ ..... **n** 3 ≃ ..... **o** 9 004 ≃ .....

p 21 395 ≃ ..... **q** $543\frac{1}{4}$ ≃ ..... **r** $\frac{19}{4}$ ≃ .....

---

3 **Find the result of each of the following operations, then approximate the result to the nearest ten as in the example :**

Example

- 13 426 + 32 623 = 46 049 ≃ 46 050
- 45 900 – 37 457 = 8 443 ≃ 8 440
- 13 465 ÷ 10 = 1 346.5 ≃ 1 350

a 32 125 + 62 342 = ... ≃ .....

b 25 304 + 9 467 = ... ≃ .....

c 36 523 + 36 582 = ... ≃ .....

d 43 267 ÷ 100 = ... ≃ .....

e 9 756 – 3 665 = ... ≃ .....

f 46 257 – 15 391 = ... ≃ .....

g 700 000 – 65 093 = ... ≃ .....

h 1 023.6 – 549.17 = ... ≃ .....

i 73 410 ÷ 1 000 = ... ≃ .....

j $24.3 + 35\frac{1}{2}$ = ... ≃ .....

k $7\frac{3}{5} - 3$ = ... ≃ .....

Lesson 8A

4 Choose the correct answer :

a 74 approximated to the nearest 10 is ..... (70 or 80 or 75)

b 619 approximated to the nearest 10 is ..... (600 or 610 or 620)

c 953.4 approximated to the nearest 10 is ..... (950 or 960 or 953)

d 12 578 approximated to the nearest 10 is .....
(12 570 or 12 580 or 12 500)

e 6 approximated to the nearest 10 is ..... (0 or 5 or 10)

f 0 approximated to the nearest 10 is ..... (0 or 1 or 5)

g 999.9 approximated to the nearest 10 is ..... (990 or 999 or 1 000)

h ..... approximated to the nearest 10 is 200
(199.1 or 208 or 192.5 or 19.99)

---

5 Answer the following :

a What is the smallest whole number that if approximated to the nearest ten gives a result of 300 ? .....

b What is the greatest whole number that if approximated to the nearest ten gives a result of 12 510 ? .....

c 📖 What is the greatest whole number that if approximated to the nearest ten gives a result of 750 ?

d 📖 What is the greatest whole number that if approximated to the nearest ten gives a result of 8 000 ?

e 📖 What is the smallest whole number that if approximated to the nearest ten gives a result of 9 420 ?

---

6 Find a whole number , the sum of its digits is 16 and if approximated to the nearest ten gives a result of 460

---

7 Find the two whole numbers when we approximate each of them to the nearest ten the result is 750 and the difference between them is maximum.

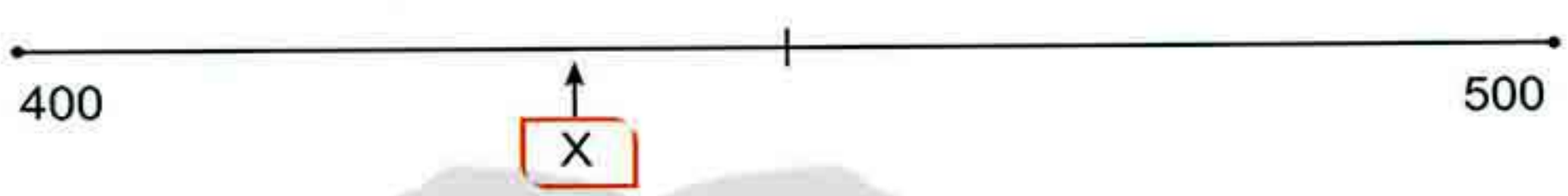
Exercise 9

Approximating to the nearest hundred or the nearest thousand

From the school book

1 Observe the number X on the number line in each of the following cases and complete :

a

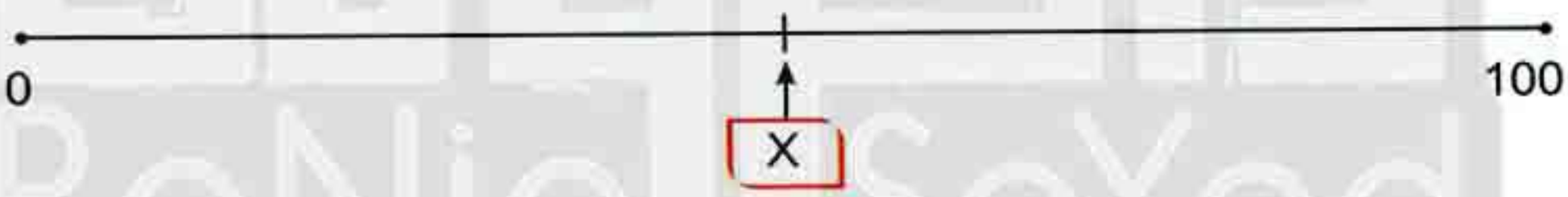


X ≃ ..... to the nearest hundred.

b

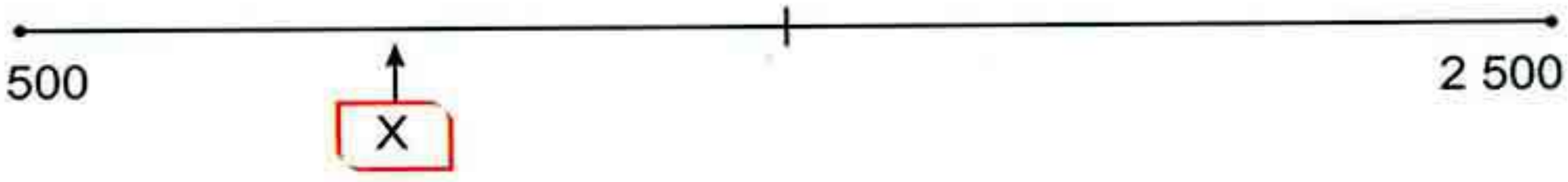
X ≃ ..... to the nearest thousand.

c



X ≃ ..... to the nearest hundred.

d



X ≃ ..... to the nearest thousand.

---

2 Approximate each of the following numbers to the nearest 100 as in (a) :

a 268 ≃ 300

b 7 248 ≃ .....

c 86 ≃ .....

d 89 950 ≃ .....

e 633.15 ≃ .....
f 35.108 ≃ .....
g 999 ≃ .....
h 99 ≃ .....
i 2 009 ≃ .....
j 90.01 ≃ .....
k 9 ≃ .....
l 4.987 ≃ .....
m 📖 372 051 ≃ .....
n 99 999 ≃ .....
o 0.98 ≃ .....
p 📖 603 499 ≃ .....
q 📖 973 049 ≃ .....
r 📖 990 909 ≃ .....

3 Approximate each of the following numbers to the nearest 1 000 as in (a) :

a 2 514 ≃ 3 000
b 57 614 ≃ .....
c 963 014 ≃ .....
d 612.35 ≃ .....
e 498.5 ≃ .....
f 108 ≃ .....
g 506.4 ≃ .....
h 📖 6 435.5 ≃ .....
i 9 999 ≃ .....
j 2 049 ≃ .....
k 📖 519 900 ≃ .....
l 11.009 ≃ .....
m 📖 75 049.9 ≃ .....
n 📖 999 500 ≃ .....
o 99 999 ≃ .....

4 Choose the correct answer :

a 7 081 ≃ 7 000 to the nearest ..... (10 or 100 or 1 000)

b 38 000 is the approximation of 37 865 to the nearest .....
(100 or 10 or 1 000)

c 59 723 ≃ ..... (to the nearest 1 000) (59 000 or 60 000 or 59 700)

d 9 748.3 ≃ 10 000 (to the nearest .....) (10 or 100 or 1 000)

Lesson 8B

e 9 705.26 ≃ 9 700 (to the nearest .....) (100 or 10 or 1 000)

f 610.9 ≃ ..... (to the nearest 100) (610 or 700 or 600)

g 3 000 is the approximation of the number ..... to the nearest thousand. (2 498 or 2 625 or 3 512)

---

5 **Find the result of each of the following operations, then approximate the result in each of the following cases :**

a 483 + 96 = ... ≃ ..... to the nearest 100

b 1 325 + 7 406 = ... ≃ ..... to the nearest 1 000

c 30 406 – 17 918 = ... ≃ ..... to the nearest 1 000

d 93 608.2 + 18 905 = ... ≃ ..... to the nearest 100

e 893.44 + 987.56 = ... ≃ ..... to the nearest 100

f 60 000 – 48.6 = ... ≃ ..... to the nearest 100

g 15 726 ÷ 100 = ... ≃ ..... to the nearest 100

h 999 ÷ 100 = ... ≃ ..... to the nearest 100

---

6 **Complete the following table with suitable numbers :**

	Number	Approximated to the nearest 10	Approximated to the nearest 100	Approximated to the nearest 1 000
a	6 927	.....	.....	.....
b	517 109	.....	.....	.....
c	4 381.5	.....	.....	.....
d	649.75	.....	.....	.....
e	38	.....	.....	.....
f	6 543 217	.....	.....	.....
g	3	.....	.....	.....

7 **Answer the following :**

a What is the smallest whole number that if approximated to the nearest hundred gives a result of 700 ? .....

b What is the greatest whole number that if approximated to the nearest thousand gives a result of 10 000 ? .....

c What is the greatest whole number that if approximated to the nearest hundred gives a result of 9 900 ? .....

d What is the smallest whole number that if approximated to the nearest thousand gives a result of 30 000 ? .....

---

8 **Complete using suitable digits :**

a ☐ 261 ≃ 5 000 to the nearest 1 000

b ☐ 47 ≃ 800 to the nearest 100

c ☐ 9 ≃ 0 to the nearest 100

d 6 ☐ 74 ≃ ☐ 300 to the nearest 100

Real Life Problems

Example

Five trucks were loaded with cement packets.
If each truck had a load of 475 packets ,
Find the number of packets approximating
the result to the nearest hundred.

The number of packets = 5 × 475 = 2 375 ≃ 2 400 packets.

Lesson 8B

a A primary school has 15 classes.
Each class has 31 pupils.
Calculate the total number of pupils approximating the result to the nearest hundred.

.....

.....

b Sally bought a blouse for L.E. 25.3 ,
a bag for L.E. 35.7 and a pair of shoes for L.E. 85
How much money did she pay approximated to the nearest ten ?

.....

.....

c The human heart , during the sport exercises , pumps 7 litres of blood in one minute. How many litres of blood does the heart pump in 30 minutes, approximating to the nearest hundred ?

.....

.....

d A box contains 36 pieces of soap.
Find the number of pieces ina 15 boxes approximating the result to the nearest hundred.

.....

.....

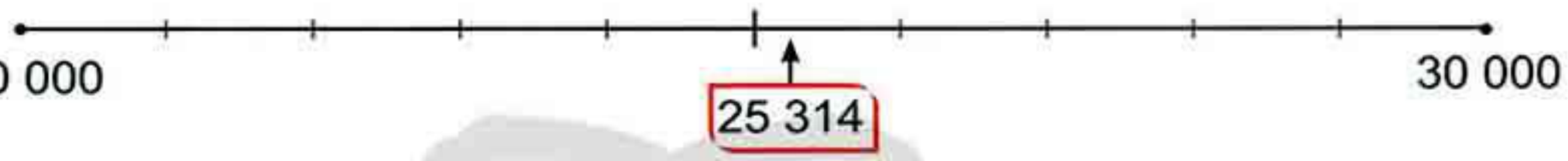
Exercise 10

Approximating to the nearest ten thousand or the nearest hundred thousand

From the school book

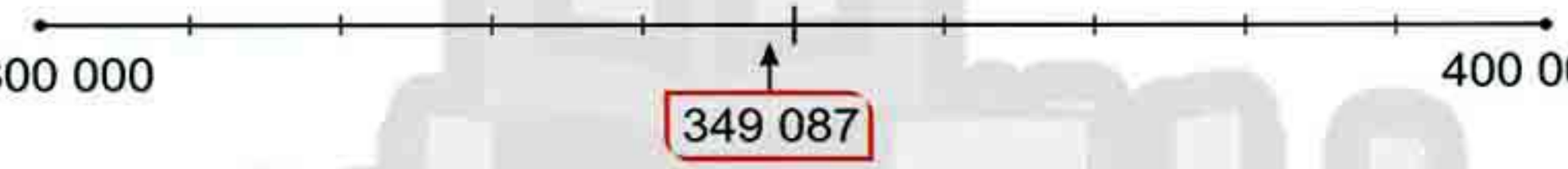
1 Notice the position of each of the following numbers on the number line , then complete :

a



25 314 ≃ ..... to the nearest ten thousand.

b

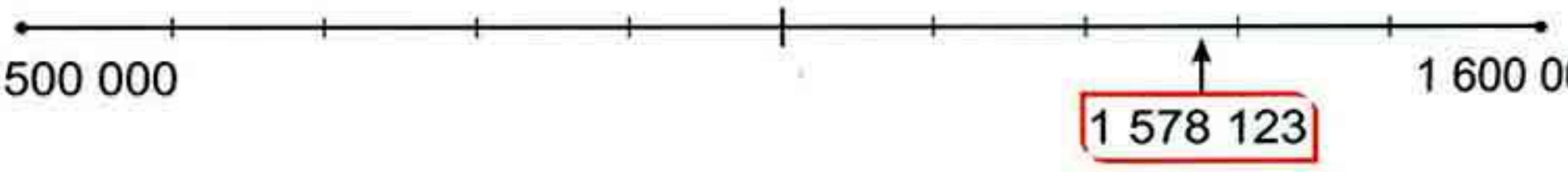


349 087 ≃ ..... to the nearest hundred thousand.

c

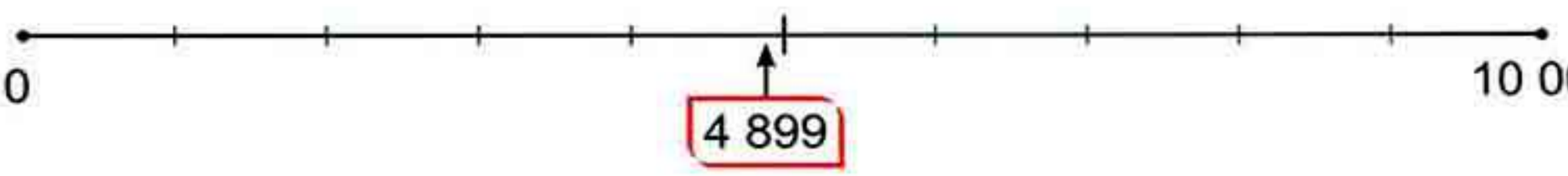
72 500 ≃ ..... to the nearest ten thousand.

d



1 578 123 ≃ ..... to the nearest hundred thousand.

e



4 899 ≃ ..... to the nearest ten thousand.

Lesson 8c

2 Approximate each of the following numbers to the nearest 10 000 :

a 153 876 ≃ .....
b 547 218 ≃ .....
c 9 256 ≃ .....
d 42 633.15 ≃ .....
e 5 000 ≃ .....
f 65 432.1 ≃ .....
g 10 500 ≃ .....
h 999 ≃ .....
i 2 050 ≃ .....
j $54\,399\frac{1}{4}$ ≃ .....
k 8 943.52 ≃ .....
l 236 849.99 ≃ .....
m 5.962 ≃ .....
n 991 234 ≃ .....

3 Approximate each of the following numbers to the nearest 100 000 :

a 872 514 ≃ .....
b 507 614 ≃ .....
c 650 049.76 ≃ .....
d 1 234 578.9 ≃ .....
e 99 897.5 ≃ .....
f 92 752.64 ≃ .....
g 4 995 007 ≃ .....
h 19 980 ≃ .....
i 7 358 ≃ .....
j 61 950 000 ≃ .....
k 87 654 321 ≃ .....
l 50.009 ≃ .....
m 999 999 ≃ .....
n $261\,542\frac{1}{4}$ ≃ .....

4 Choose the correct answer :

a 15 674 ≃ ..... (to the nearest 10 000)

(20 000 or 15 000 or 16 000)

b 249 108 ≃ ..... (to the nearest 100 000)

(100 000 or 200 000 or 24 000)

c 768 154 ≃ 770 000 approximated to the nearest .....

(1 000 or 10 000 or 100 000)

d 8 321 ≃ 10 000 approximated to the nearest .....

(1 000 or 10 000 or 100 000)

e 1 217 ≃ ..... (to the nearest 10 000) (1 000 or 0 or 1 200)

---

5 **Find the result of each of the following operations , then approximate the result in each of the following case :**

a 7 842 + 12 715 = ... ≃ ..... to the nearest ten thousand.

b 87 540 – 5 999 = ... ≃ ..... to the nearest ten thousand.

c 18 395 + 970 406 = ... ≃ ..... to the nearest hundred thousand.

d 122 406.7 – 49 618.13 = ... ≃ ..... to the nearest hundred thousand.

e 57 482.53 + 6 680.364 = ... ≃ ..... to the nearest hundred thousand.

f 37 805.8 – 21 947.004 = ... ≃ ..... to the nearest ten thousand.

---

6 **Answer the following :**

a What is the smallest whole number that if approximated to the nearest ten thousand gives a result of 40 000 ? .....

b 🕮 What is the greatest whole number that if approximated to the nearest ten thousand gives a result of 20 000 ? .....

c What is the smallest whole number that if approximated to the nearest ten thousand gives a result of 10 000 ? .....

d 🕮 What is the greatest different digits whole number that if approximated to the nearest hundred thousand gives a result of 98 500 000 ? .....

e 🕮 What is the smallest different digits whole number that if approximated to the nearest ten thousand gives a result of 21 060 000 ? .....

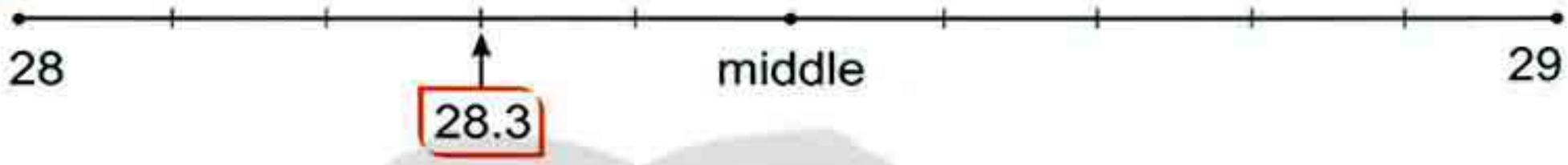
Exercise 11

Approximating to the nearest unit

From the school book

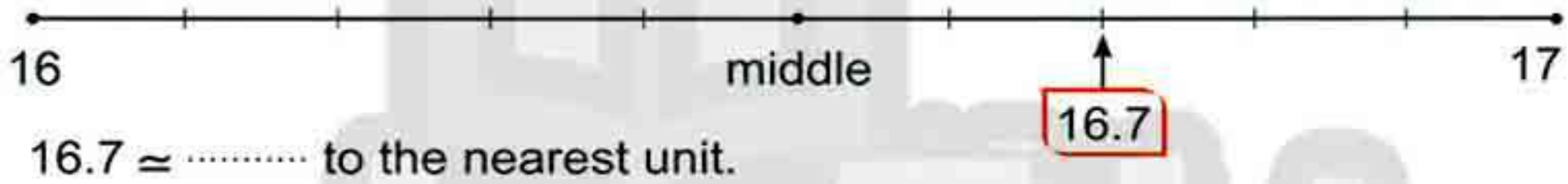
1 Notice the position of each of the following numbers on the number line , then complete :

a



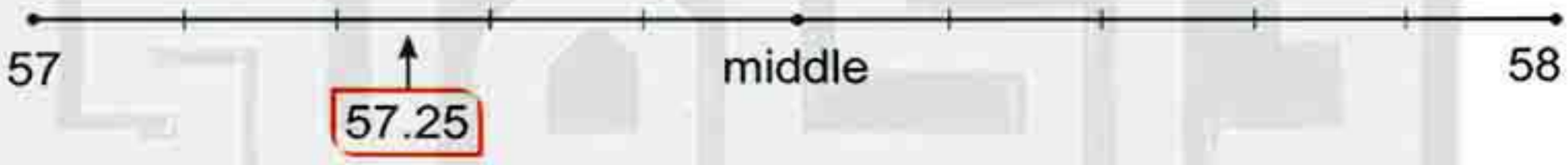
28.3 ≃ ..... to the nearest unit.

b



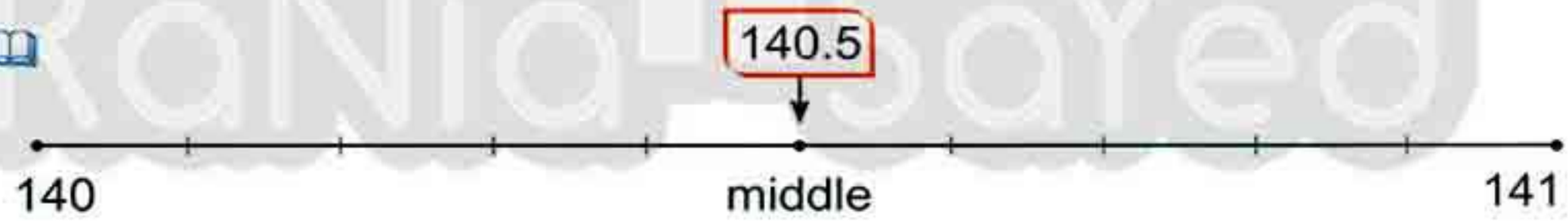
16.7 ≃ ..... to the nearest unit.

c



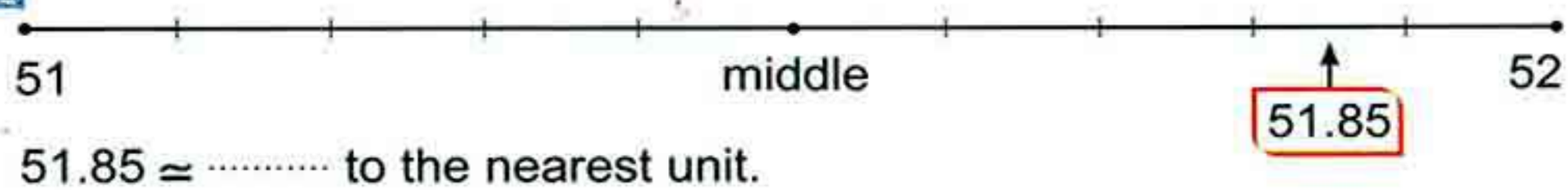
57.25 ≃ ..... to the nearest unit.

d



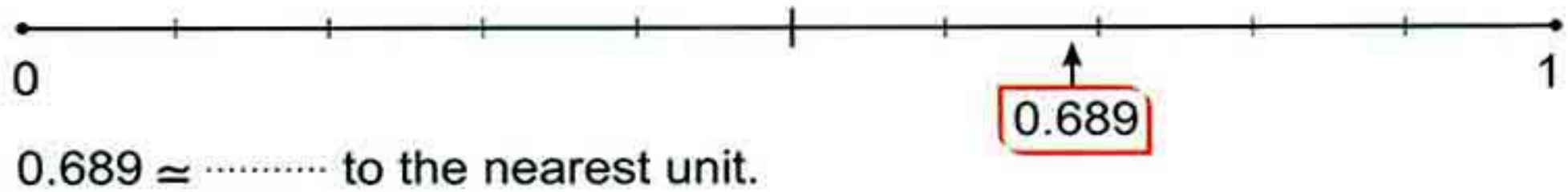
140.5 ≃ ..... to the nearest unit.

e



51.85 ≃ ..... to the nearest unit.

f



0.689 ≃ ..... to the nearest unit.

Lesson 8D

2 Approximate each of the following numbers to the nearest unit :

a 2.7 ≃ ..... **b** 3.1 ≃ ..... **c** 📖 53.5 ≃ .....

d 7 105.09 ≃ ..... **e** 28 147.801 ≃ ..... **f** 0.215 ≃ .....

g 0.512 ≃ ..... **h** 9.9 ≃ ..... **i** 📖 10.1 ≃ .....

j 📖 624.09 ≃ ..... **k** 📖 600.601 ≃ ..... **l** 📖 $\frac{7}{10}$ ≃ .....

m 📖 $\frac{3}{5}$ ≃ ..... **n** 0.009 ≃ ..... **o** 📖 $967\frac{3}{4}$ ≃ .....

p 0.999 ≃ ..... **q** $5\frac{2}{9}$ ≃ ..... **r** $3\frac{5}{8}$ ≃ .....

s $7\frac{1}{3}$ ≃ ..... **t** $2\frac{73}{100}$ ≃ ..... **u** $\frac{7}{9}$ ≃ .....

---

3 Choose the correct answer :

a 14.6 ≃ ..... (to the nearest unit) (14 or 15 or 14.5)

b 158.3 ≃ ..... (to the nearest ten) (158 or 150 or 160)

c 25.49 ≃ ..... (to the nearest unit) (26 or 25 or 25.5)

d 0.947 ≃ ..... (to the nearest unit) (1 or 0 or 10)

e 999.9 ≃ ..... (to the nearest unit) (990 or 999 or 1 000)

f The number 254 is the approximation of ..... (to the nearest unit)
(254.6 or 253.1 or 253.9)

g $\frac{20}{3}$ ≃ ..... (to the nearest unit) (6.6 or 6 or 7)

h 652 to the nearest thousand ..... 989.88 to the nearest unit. (< or = or >)

i 97.75 m. ≃ ..... (to the nearest metre) (100 or 97 or 98)

j 3 187 cm. ≃ ..... (to the nearest metre) (32 or 31 or 3)

k 39 days ≃ ..... weeks. (to the nearest week) (5 or 6 or 7)

l 140 minutes ≃ ..... hours. (1 or 2 or 3)

m 90 hours ≃ ..... days. (to the nearest day) (4 or 3 or 5)

n P.T. 7 085 ≃ L.E. ..... (71 or 70 or 708)

o 39 months ≃ ..... years. (2 or 3 or 4)

p If the distance between two cities is 4 800 m.
this approximately equals ..... km. (5 000 or 5 or 4)

---

4 Find the result of each of the following operations, then approximate the result to the nearest whole number :

a 3.7 + 2.4 = ... ≃ .....

b 25.2 – 16.3 = ... ≃ .....

c 158.24 – 62.76 = ... ≃ .....

d 📖 75 + 64.3 = ... ≃ .....

e 📖 53.64 + 8.601 = ... ≃ .....

f 📖 104.9 – 23.58 = ... ≃ .....

g 345 ÷ 100 = ... ≃ .....

h 9 681 ÷ 1 000 = ... ≃ .....

i $3.5 - 1\frac{3}{4}$ = ... ≃ .....

j (5 242 ÷ 100) + (3 426 ÷ 1 000) = ... ≃ .....

---

5 Approximate to the nearest km. :

a 532.41 km. ≃ ..... km.

b 63 622 m. ≃ ..... km.

c 2 764 815 dm. ≃ ..... km.

d 9 745 312 cm. ≃ ..... km.

e 73 489 m. ≃ ..... km.

f 4 518 253 dm. ≃ ..... km.

---

6 Approximate to the nearest L.E. :

a L.E. 57.3 ≃ L.E. .....

b P.T. 305 ≃ L.E. .....

Lesson 8D

c L.E. 759 $\frac{3}{5}$ ≃ L.E. .....

d P.T. 25 615 ≃ L.E. .....

e L.E. 537.6 ≃ L.E. .....

f P.T. 569 425 ≃ L.E. .....

7 **Approximate to the nearest hour :**

a 5 hr. and 15 min. ≃ ..... hr.

b 2 hr. and 35 min. ≃ ..... hr.

c 7 hr. and 30 min. ≃ ..... hr.

Real Life Problems

a The monthly salary of an employee is L.E. 700.35 , if he spends L.E. 425 of it.
How much money does he save every month approximating to then earest L.E. ?

.....

b Waleed bought a pair of trousers for L.E. 89.6 and a shirt for L.E. 30.75, if he gave L.E. 200 to the shopkeeper.
How much change remained with Waleed approximating the result to the nearest pound ?

.....

.....

c Calculate the perimeter of a triangle , given that its sides are of lengths 67.8 cm. , 15.9 cm. and 73.2 cm. approximating the result to the nearest metre.

.....

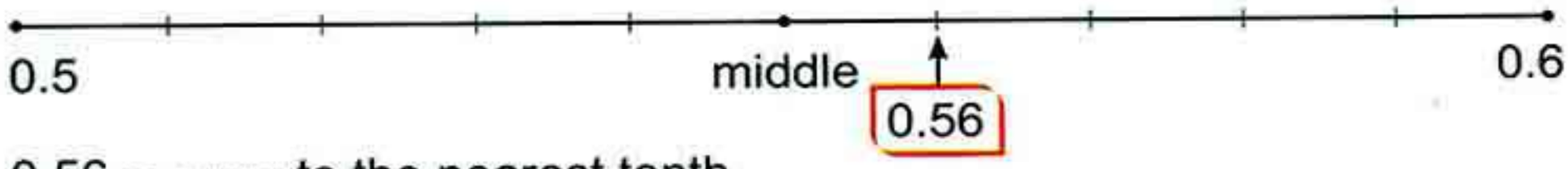
Exercise 12

Approximating to the nearest tenth

From the school book

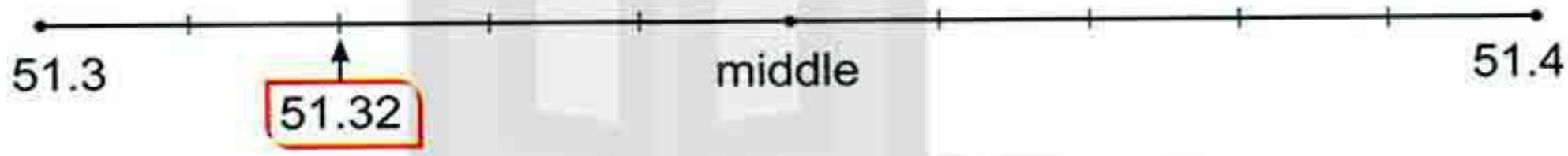
1 Notice the position of each of the following numbers on the number line, then complete :

a



0.56 ≃ ..... to the nearest tenth.

b



51.32 ≃ ..... to the nearest tenth.

c

9.16 ≃ ..... to the nearest 1 decimal place.

d

56.71 ≃ ..... to the nearest tenth.

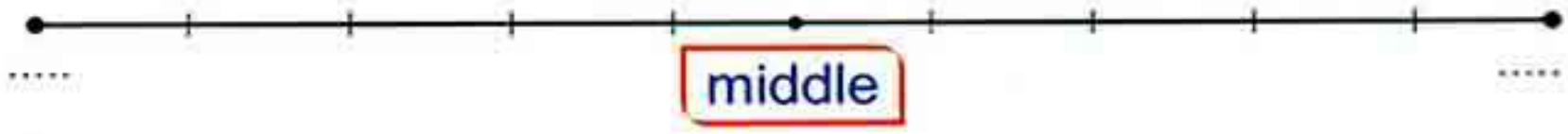
2 Determine the position of each of the following numbers on the number line, then complete :

a 134.29

134.29 ≃ ..... to the nearest tenth.

Lesson 8E

b 70.07



70.07 ≃ ..... to the nearest 1 decimal place.

3 Approximate each of the following numbers to the nearest 1 decimal place :

a 7.34 ≃ .....

b 13.75 ≃ .....

c 296.04 ≃ .....

d 83.914 ≃ .....

e 90.092 ≃ .....

f 0.208 ≃ .....

g 170.597 ≃ .....

h 3.92 ≃ .....

i 43.95 ≃ .....

j 38 000.75 ≃ .....

k 121.005 ≃ .....

l 257.06 ≃ .....

m $\frac{1}{8}$ ≃ .....

n 0.07 ≃ .....

o 0.994 ≃ .....

p $502\frac{37}{100}$ ≃ .....

q $449\frac{3}{4}$ ≃ .....

r $6\,399\frac{7}{50}$ ≃ .....

4 Choose the correct answer :

a 65.35 ≃ ..... (to the nearest tenth) (65 or 65.4 or 65.3)

b 53.825 ≃ ..... (to the nearest $\frac{1}{10}$) (54 or 53.9 or 53.8)

c 17.947 ≃ ..... (to the nearest 1 decimal point) (17.95 or 17.9 or 18)

d 348.6 ≃ ..... (to the nearest unit) (348 or 340 or 349)

e 371.456 ≃ ..... (to the nearest 100) (300 or 400 or 371.46)

f 9 317 ≃ 9 000 to the nearest ..... (10 or 100 or 1 000)

g $14\frac{3}{7} \simeq 10$ to the nearest ..... (unit or 10 or tenth)

h $39.953 \simeq$ ..... (to the nearest tenth) (39.9 or 40 or 39.1)

---

5 Find the result of each of the following operations, then approximate the result to the required approximation :

a $14.201 + 9.315 =$ ..... $\simeq$ ..... to the nearest tenth.

b $0.816 - 0.207 =$ ..... $\simeq$ ..... to the nearest tenth.

c $158.24 + 62.76 =$ ..... $\simeq$ ..... to the nearest ten.

d $25.6 + 63.7 =$ ..... $\simeq$ ..... to the nearest unit.

e 📖 $864.3 + 75.2 =$ ..... $\simeq$ ..... to the nearest ten.

f 📖 $453.64 - 72.317 =$ ..... $\simeq$ ..... to the nearest 1 decimal.

g $353.607 - 214.98 =$ ..... $\simeq$ ..... to the nearest unit.

h $6.47 + 24.7 + 1.562 =$ ..... $\simeq$ ..... to the nearest $\frac{1}{10}$

i $251.76 - 38\frac{1}{4} =$ ..... $\simeq$ ..... to the nearest tenth.

---

6 Complete with suitable numbers :

	Number	The number approximated to the nearest					
		10 000	1 000	100	10	unit	tenth
a	124 547.259	.....	.....	.....	.....	.....	.....
b	205 138.613	.....	.....	.....	.....	.....	.....
c	78 314.501	.....	.....	.....	.....	.....	.....
d	7 007.499	.....	.....	.....	.....	.....	.....
e	320.549	.....	.....	.....	.....	.....	.....
f	288 003.507	.....	.....	.....	.....	.....	.....
g	3.172	.....	.....	.....	.....	.....	.....
h	0.008	.....	.....	.....	.....	.....	.....

Lesson 8E

7 **Write each of the required numbers using all the digits 2, 3, 5, 8 and a decimal point to satisfy the following equalities :**

Example

82.35 ≃ 82 to the nearest whole number.

a ..... ≃ 20 to the nearest ten.

b ..... ≃ 83.3 to the nearest tenth.

c ..... ≃ 8 000 to the nearest thousand.

d ..... ≃ 9 000 to the nearest thousand.

e ..... ≃ 28.4 to the nearest tenth.

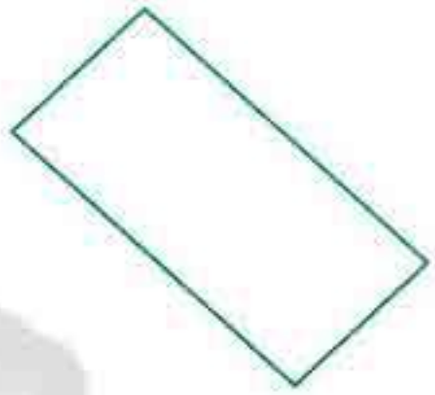
Exercise 13

Congruency

From the school book

1 Are the figures congruent ? Write Yes or No as in (a) :

a

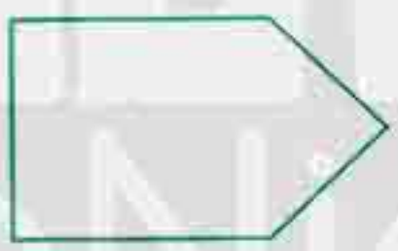


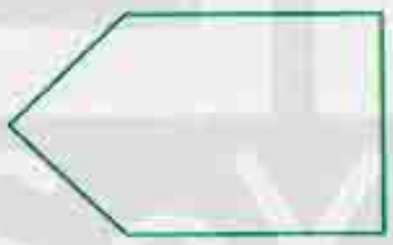
Yes

b

.....

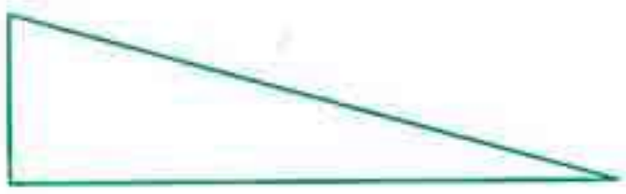
c

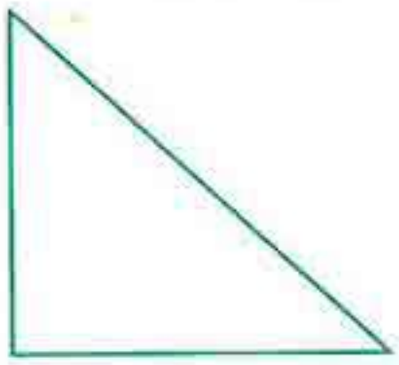




.....

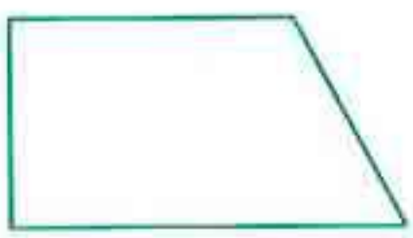
d

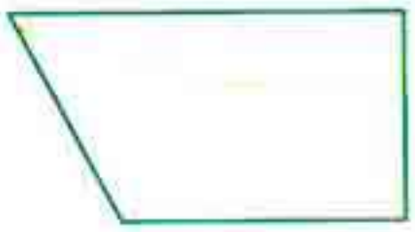




.....

e





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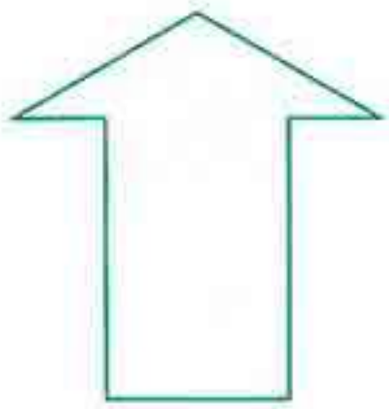
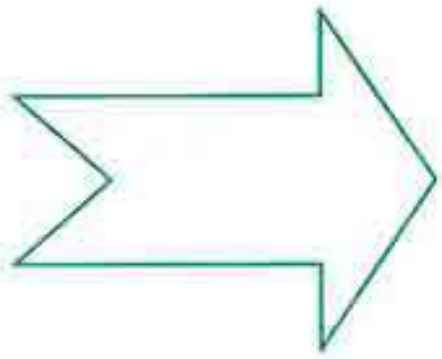
Lesson 1

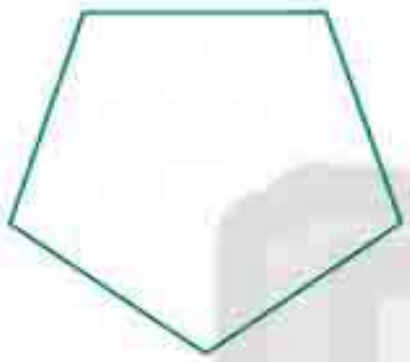
f

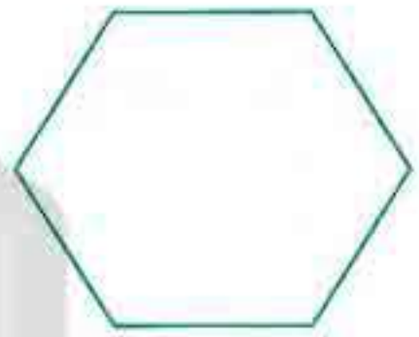




.....

g





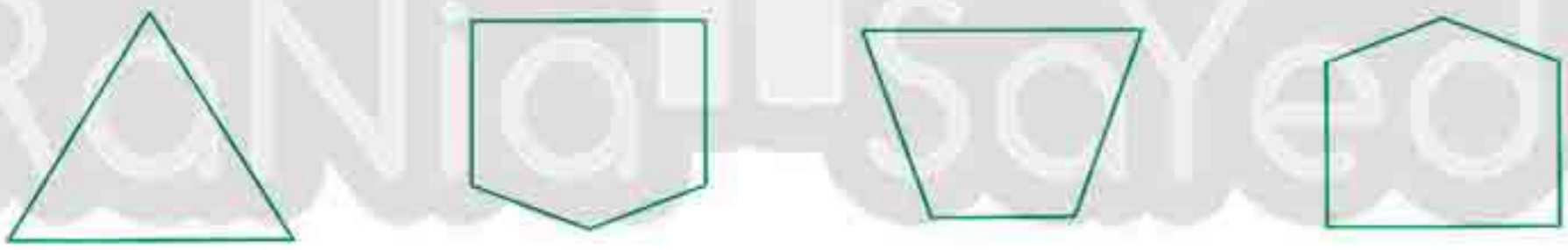
.....

h

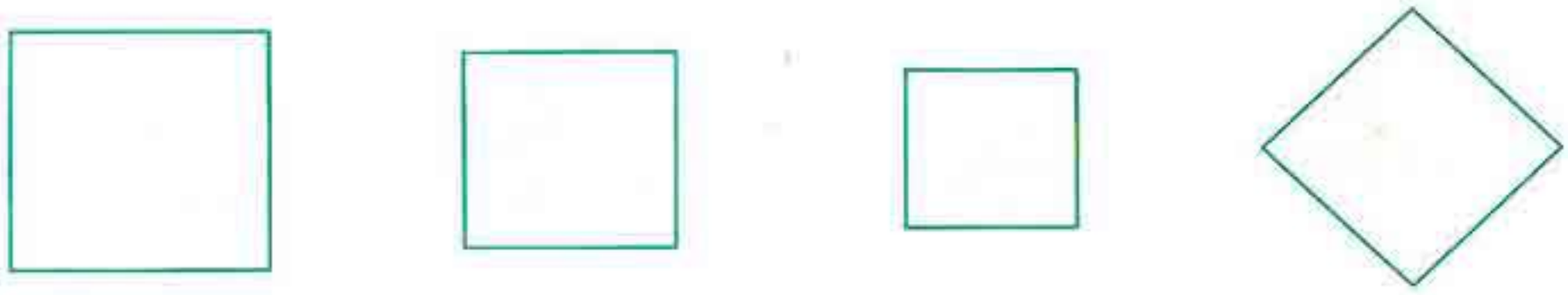
.....

2 **Circle the two congruent shapes in each of the following cases. Use your geometric instruments to review your answer :**

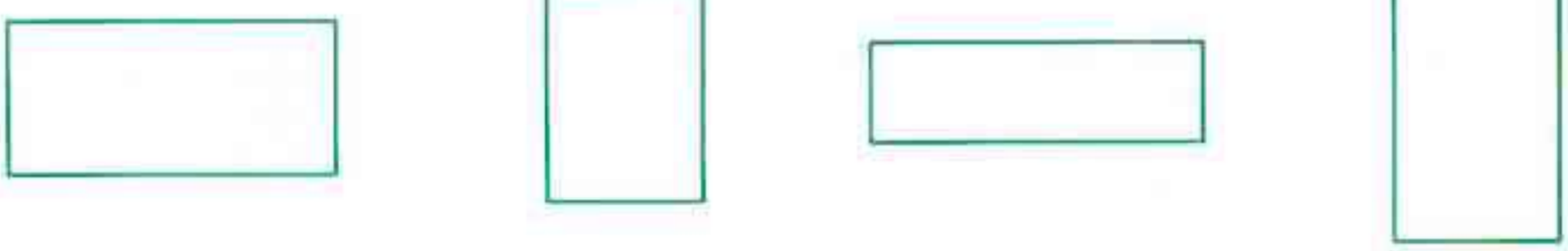
a



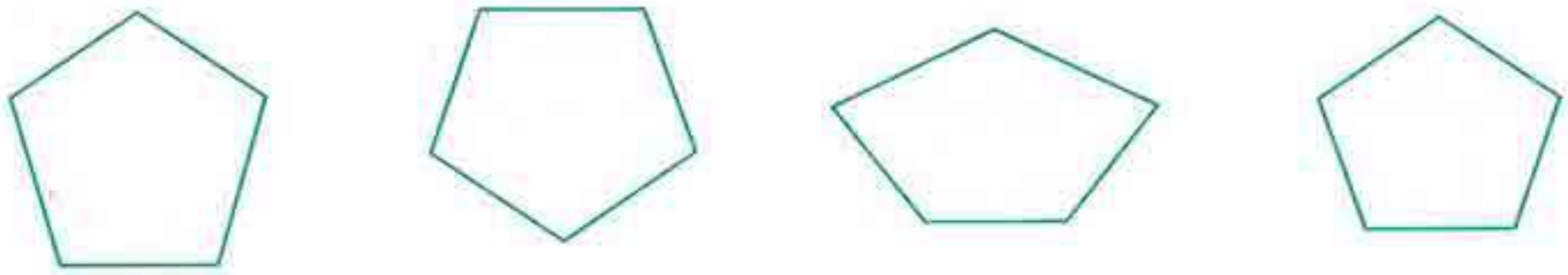
b



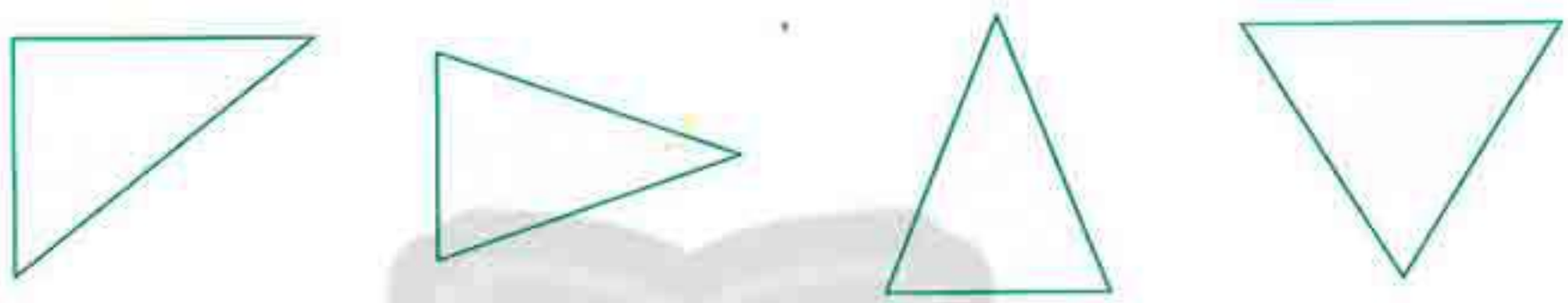
c



d



e



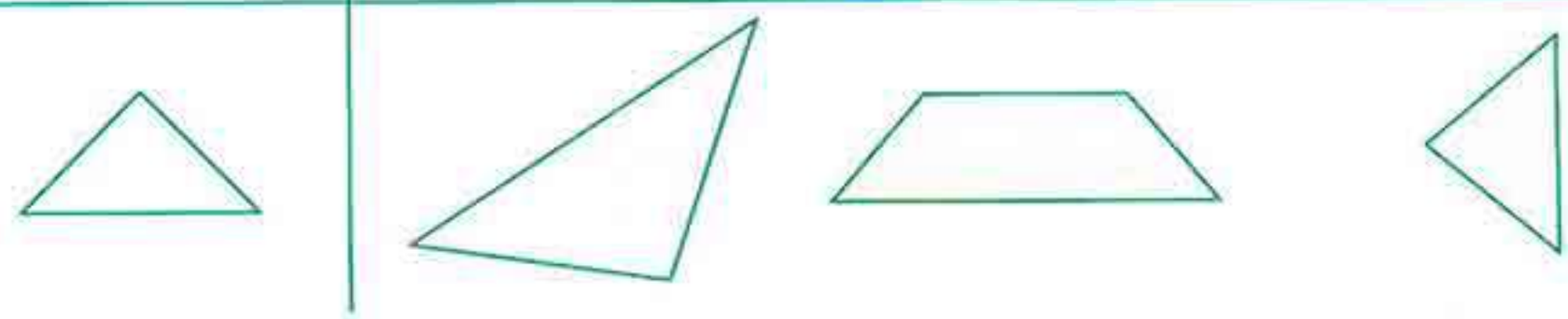
3 Ring the figure which is congruent to the first one :

a

b

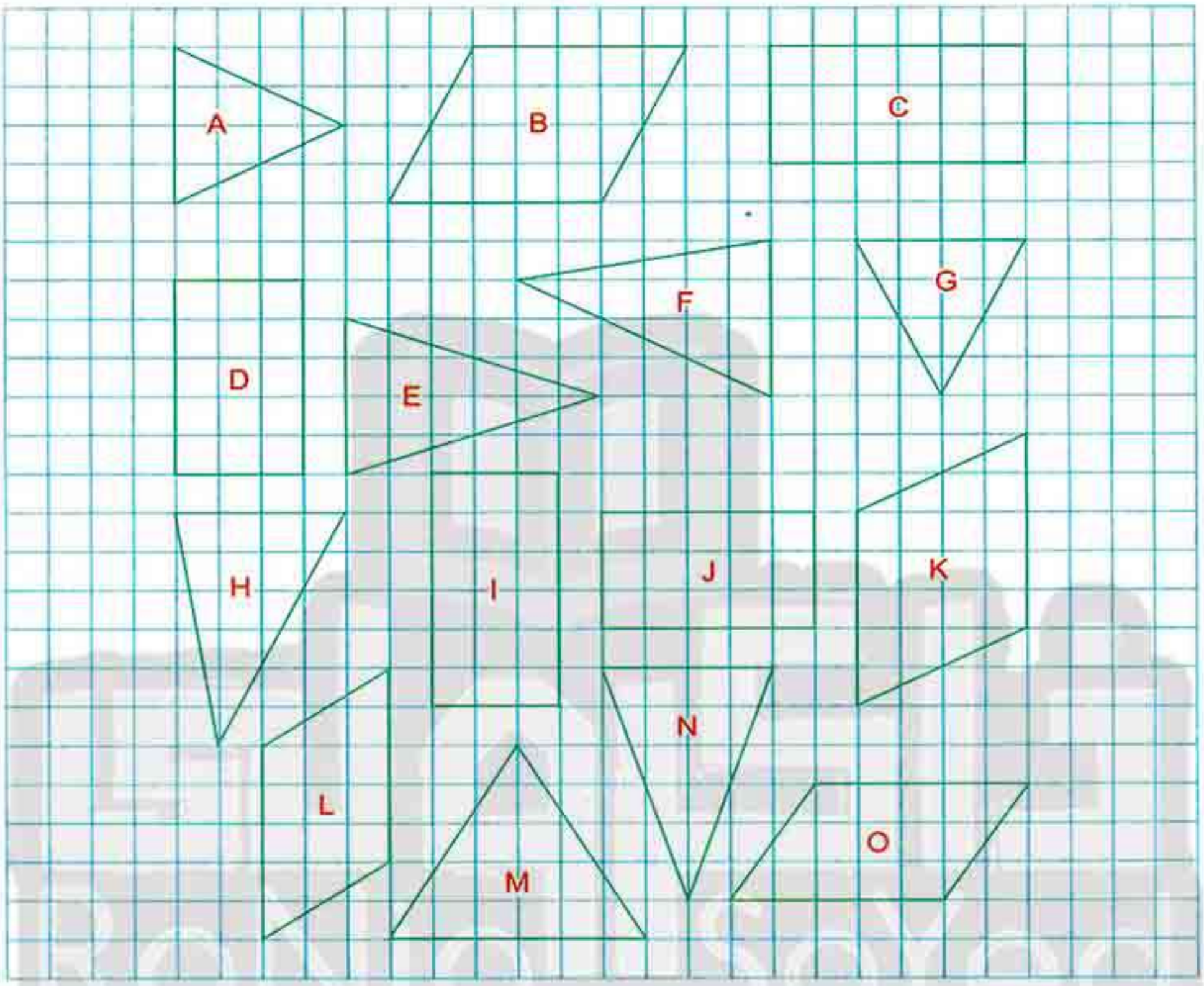
c

d



Lesson 1

4 **Observe the following figures and complete, then use your geometric instruments to review your answer :**



a The figure ..... is congruent to the figure J

b The figure ..... is congruent to the figure A

c The figure ..... is congruent to the figure F

d The figure ..... is congruent to the figure K

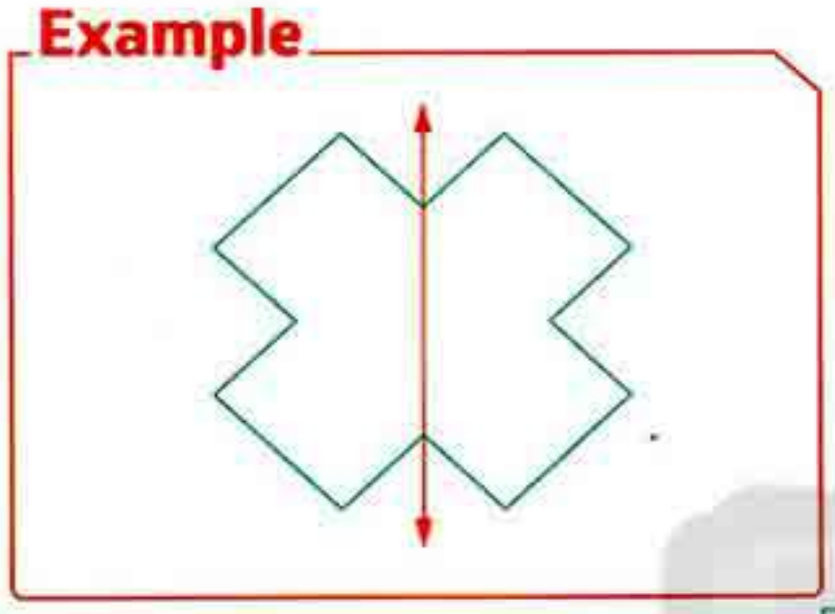
e The figure ..... is congruent to the figure O

f The figure ..... is congruent to the figure C

g The figure ..... is congruent to the figure N

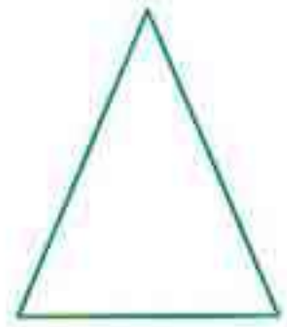
5 Draw a line in each of the following figures, to get two congruent figures if possible as in the following example :

Example



a

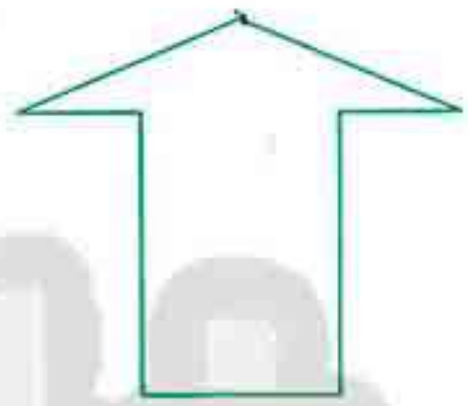
b



c

d

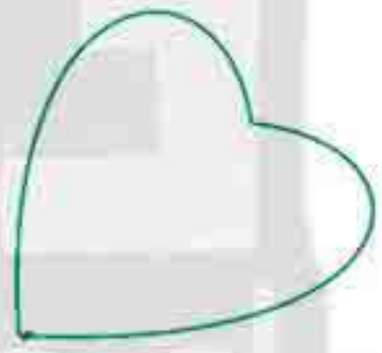
e



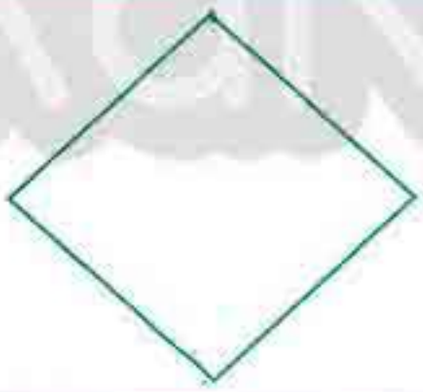
f

g

h



i



j

k

l

m

n

o

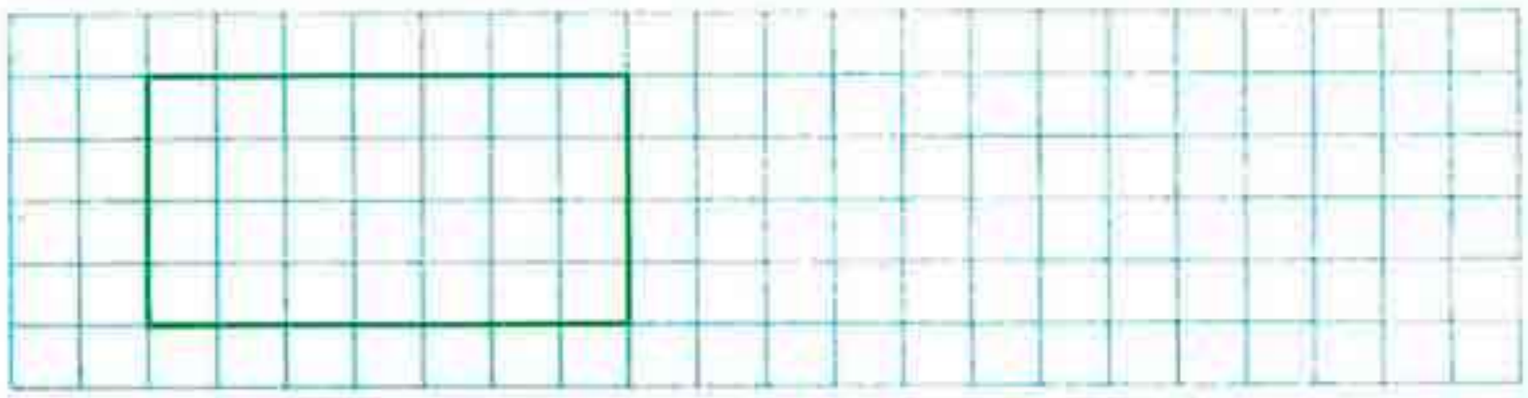
p

q

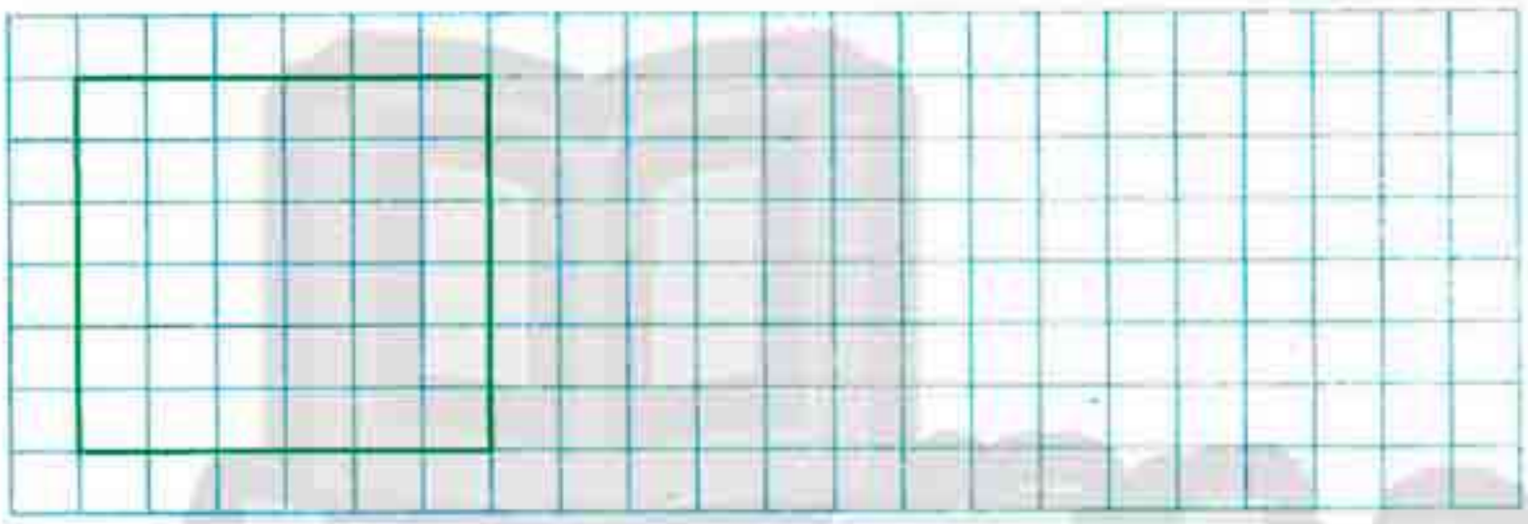
Lesson 1

6 Draw a congruent figure for each of the following figures :

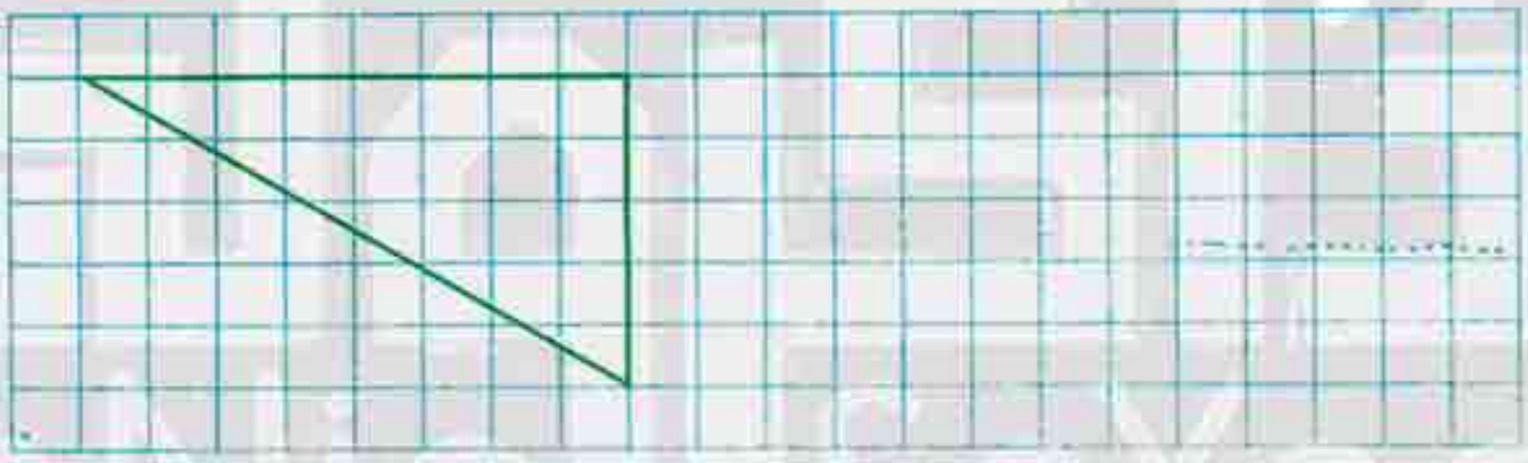
a



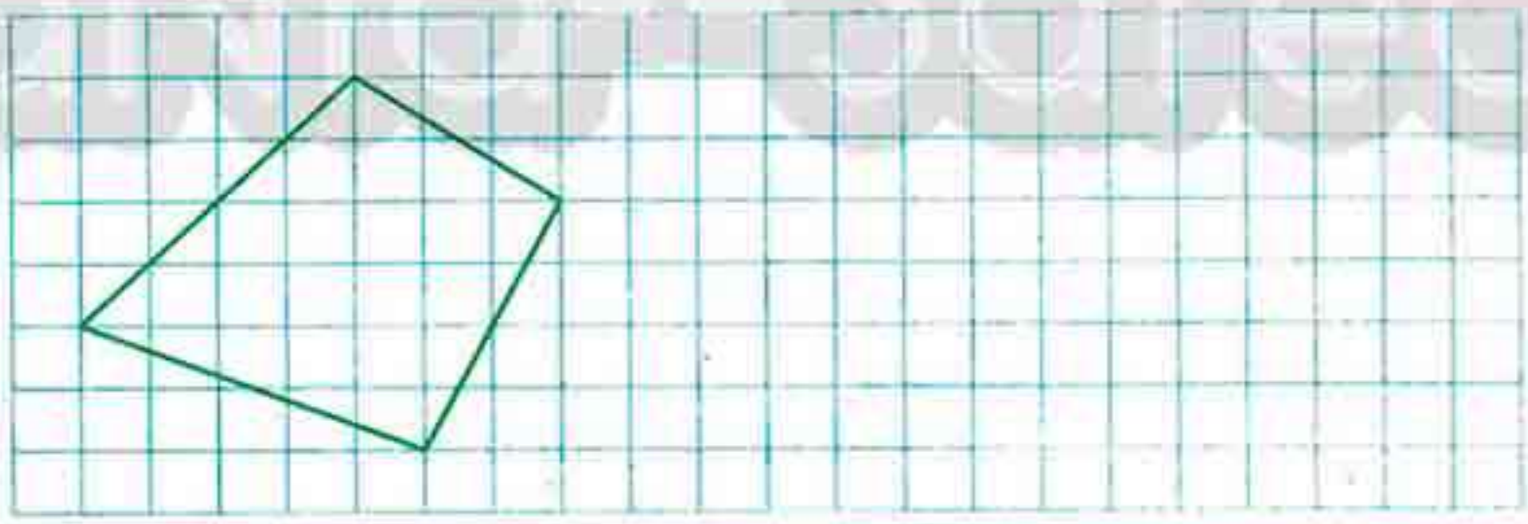
b



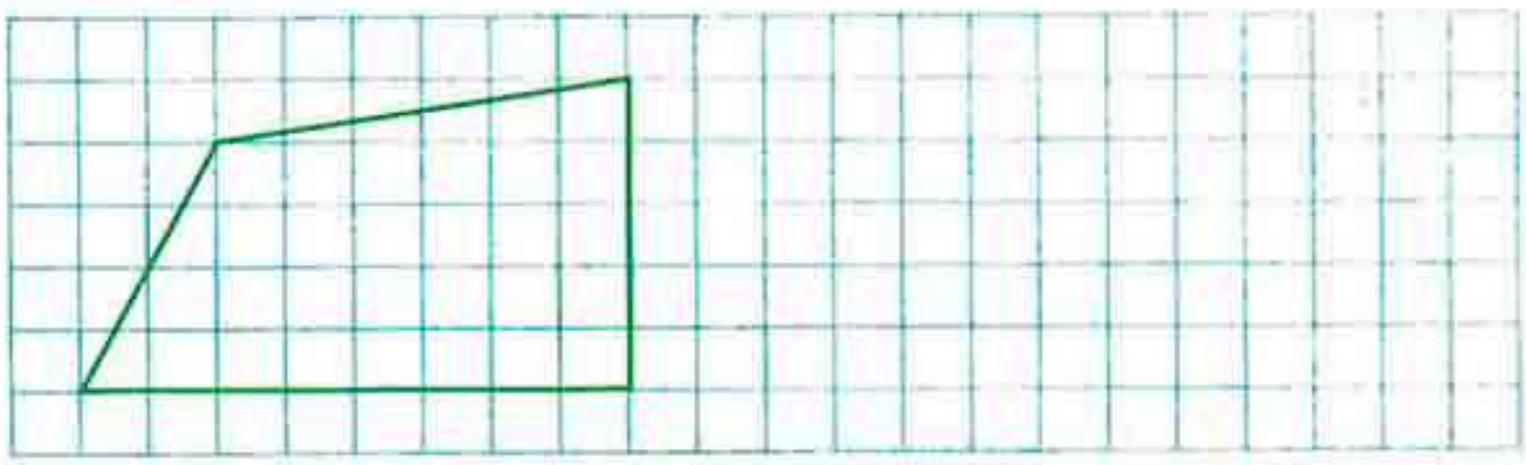
c



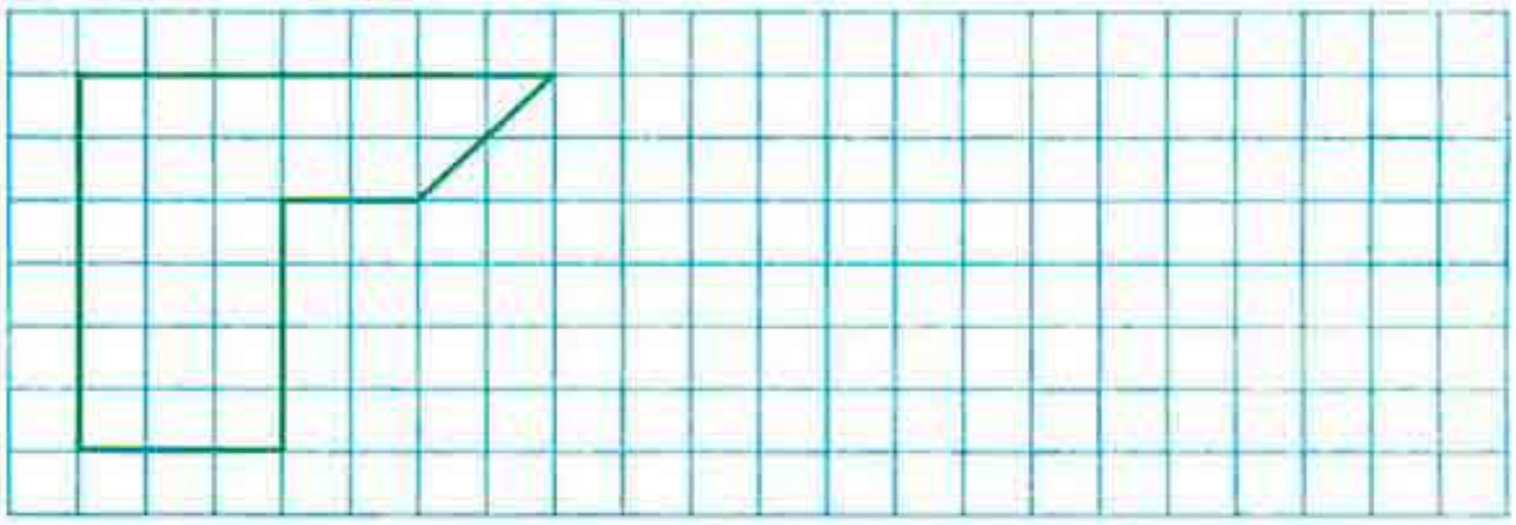
d



e



f



---

7 **If the two opposite figures are congruent , complete :**

a MN = ...

b NO = ...

c OP = ...

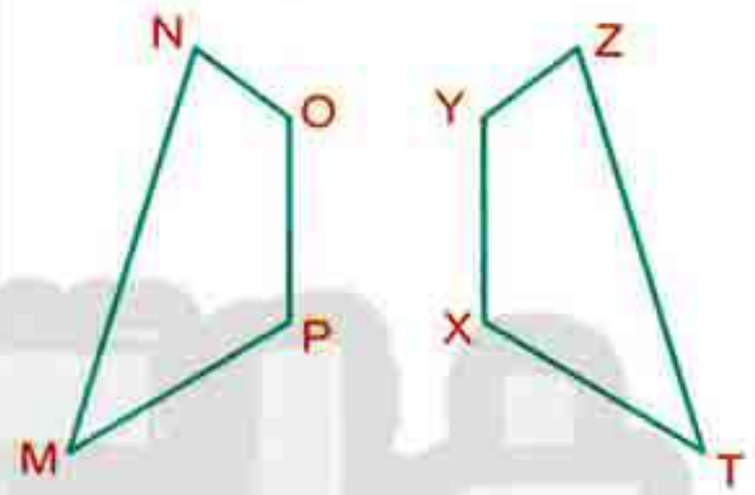
d PM = ...

e m (∠ M) = ...

f m (∠ N) = ...

g m (∠ O) = ...

h m (∠ P) = ...



---

8 **In the opposite figure : if Δ LMN ≡ Δ CBA , complete :**

a ∠ M ≡ .....

b ∠ A ≡ .....

c ∠ C ≡ .....

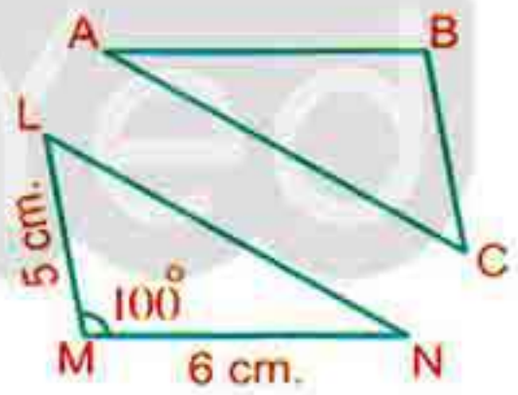
d $\overline{LM}$ ≡ .....

e $\overline{MN}$ ≡ .....

f $\overline{LN}$ ≡ .....

g m (∠ B) = ...°

h BC = ... cm.



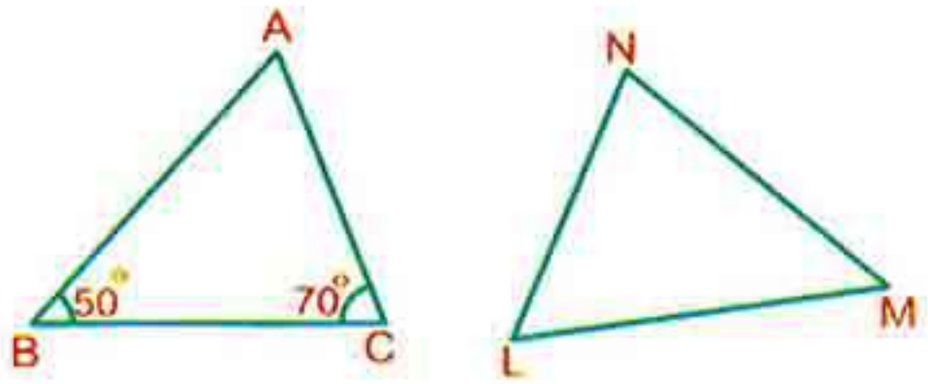
---

9 **In the opposite figure : if Δ ABC ≡ Δ LMN , complete :**

a m (∠ M) = ...°

b m (∠ N) = ...°

c m (∠ L) = ...°



Lesson 1

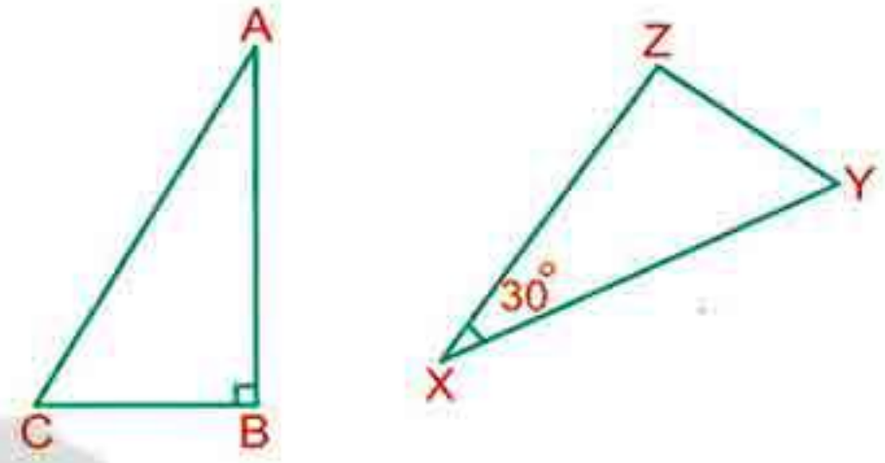
10 In the opposite figure : if Δ ABC ≡ Δ XZY , complete :

a m (∠ Z) = ... °

b m (∠ Y) = ... °

c m (∠ A) = ... °

d m (∠ C) = ... °



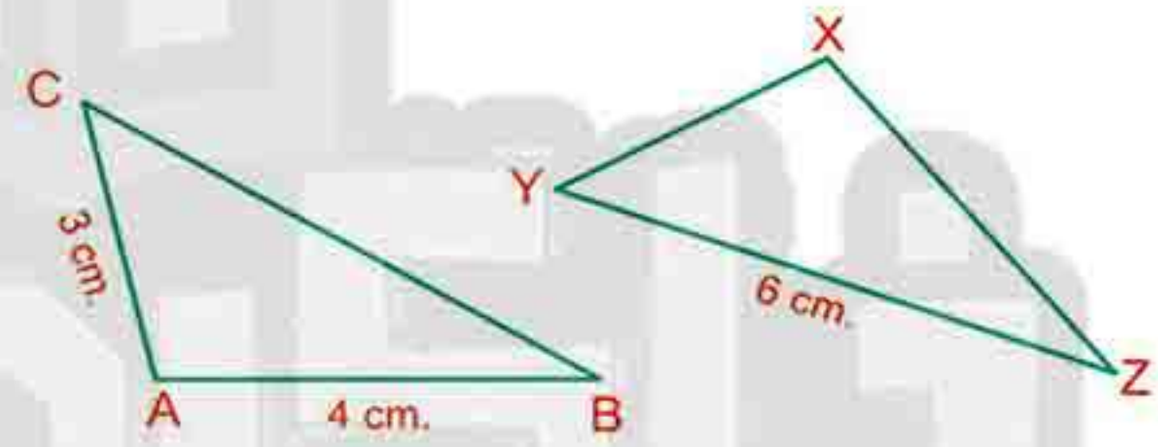
---

11 In the opposite figure : if Δ ABC ≡ Δ XZY , complete :

a XZ = ... cm.

b XY = ... cm.

c The perimeter of Δ ABC
= ..... cm.



---

12 In the opposite figure , complete :

a $\overline{XY}$ ≡ .....

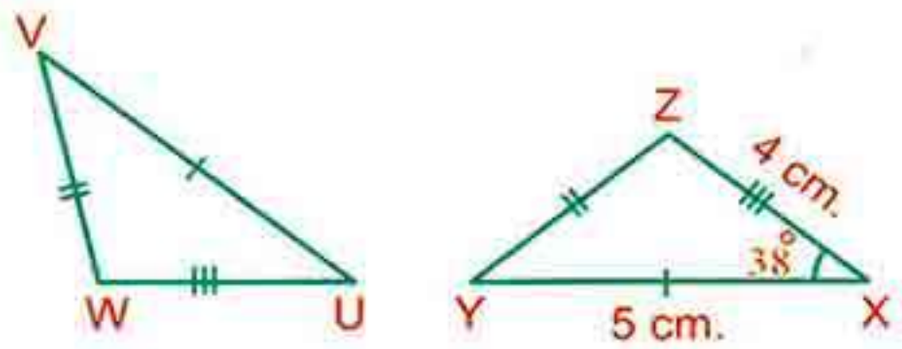
b ∠ V ≡ .....

c $\overline{WU}$ ≡ .....

d ∠ Z ≡ .....

e m (∠ U) = ... °

f UW = ... cm.



13 Complete :

a Two polygons are congruent if their corresponding sides are ..... in length and their corresponding angles are ..... in measure.

b Two squares are congruent if the side length of one of them is ..... to the side length of the other.

c Two rectangles are congruent if two dimensions of one of them are ..... to the two dimensions of the other.

d Any two triangles are congruent if each ..... is congruent to its corresponding side in the other triangle.

e A diagonal of the rectangle divides it into two ..... triangles.

f If $\Delta ABC \equiv \Delta RST$, then $\angle B \equiv \angle$ .....

g If $\Delta ABC \equiv \Delta DEF$, then $\overline{BC} \equiv$ .....

h The square of side length 4 cm. is congruent to the square whose area is ..... cm^2.

i The square of side length 5 cm. is congruent to another square whose perimeter is ..... cm.

---

14 Put (✓) for the correct statement and (×) for the incorrect one :

a Two polygons are congruent if their corresponding sides have the same length. ( )

Lesson 1

b Two polygons are congruent if their corresponding angles have the same measure. ( )

c Two squares are congruent if the side length of one of them equals the side length of the other. ( )

d Two rectangles are congruent if the two dimensions of one of them equal the two dimensions of the other. ( )

e 🕮 A scalene triangle can be congruent to an isosceles triangle. ( )

f 🕮 A square of side length 7 cm. can be congruent to a rectangle of dimensions 7 cm. and 5 cm. ( )

g Two triangles are congruent if each side length of one of them equals the corresponding side length of the other. ( )

h Any two equilateral triangles are congruent. ( )

i Any two squares are congruent. ( )

j Two triangles are congruent if the measures of the angles of one of them are equal to the corresponding parts of the other. ( )

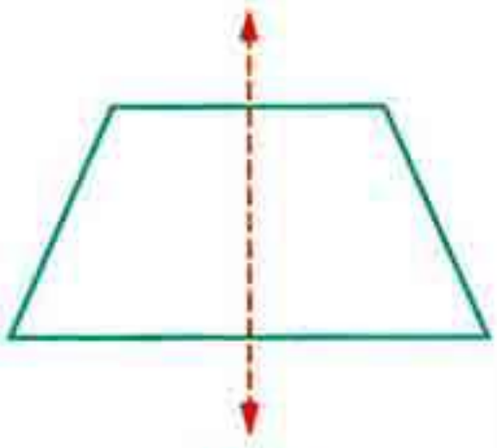
Exercise 14

Symmetrical figures and lines of symmetry

From the school book

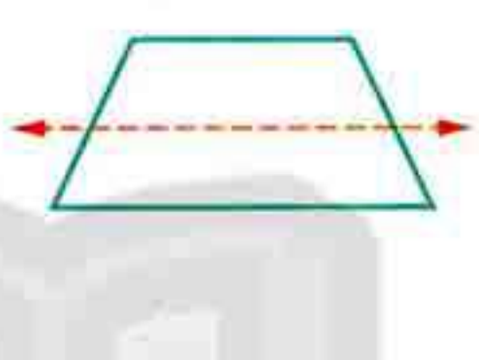
1 Is the dashed line a line of symmetry ? Write Yes or No as in the example :

Example



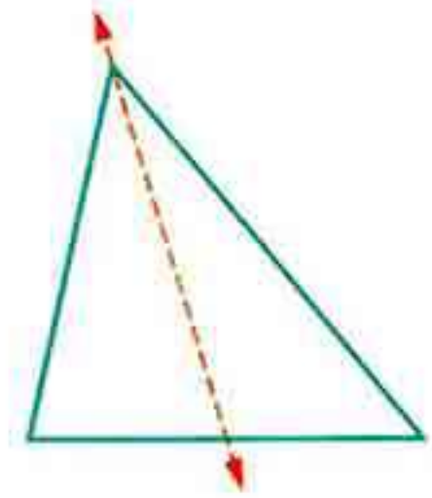
Yes

a



.....

b

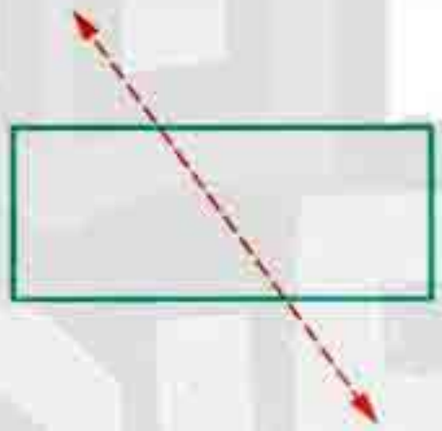


.....

c

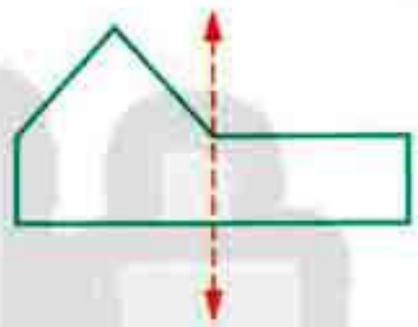
.....

d



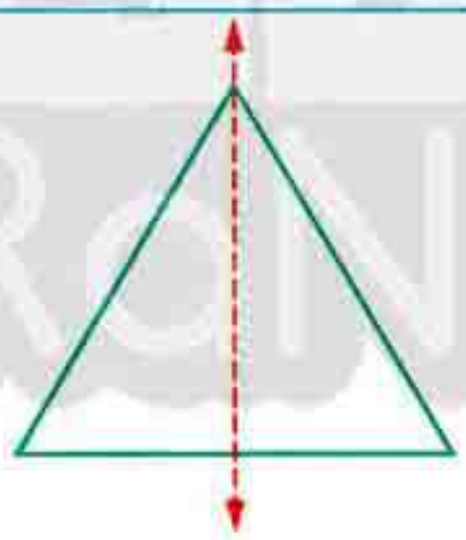
.....

e



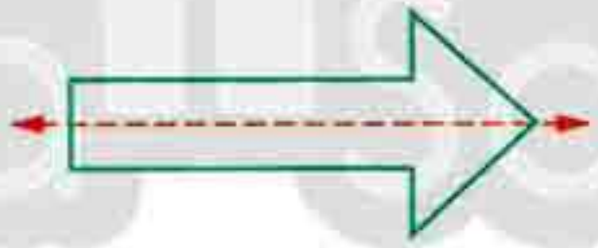
.....

f



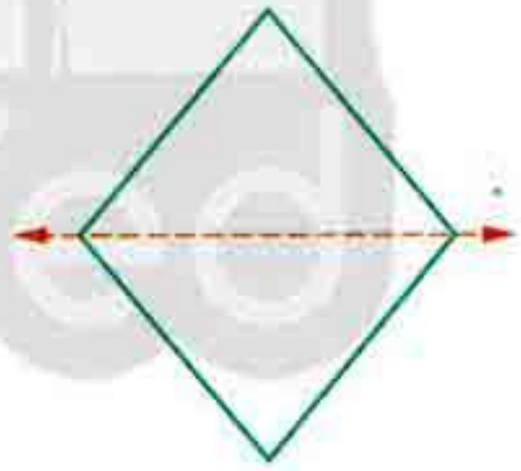
.....

g



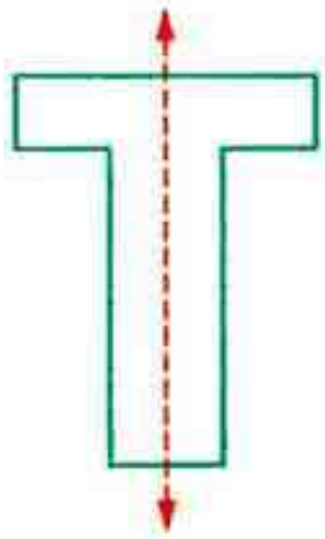
.....

h



.....

i

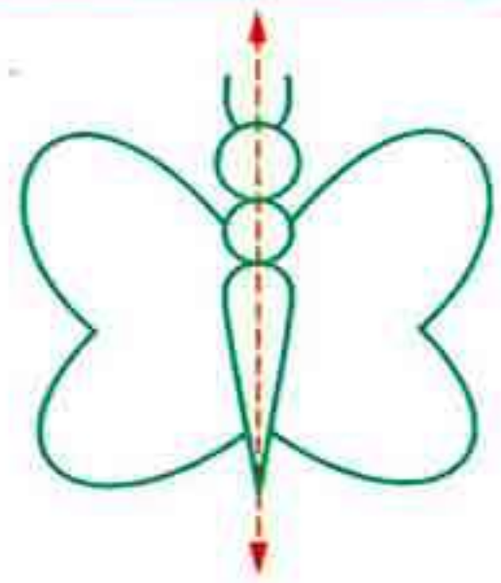


.....

j

.....

k



.....

2 Does the figure have a line of symmetry ? Write Yes or No as in the example :

Example

Yes

a

.....

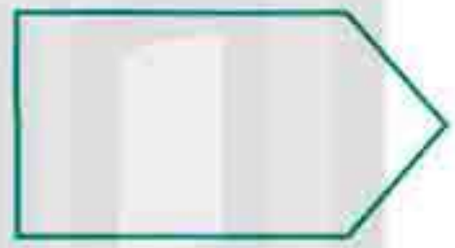
b

.....

c

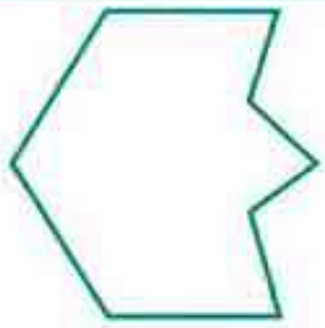
.....

d



.....

e



.....

f

.....

g

.....

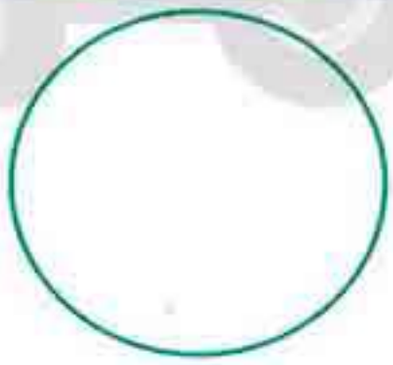
h

.....

i

.....

j

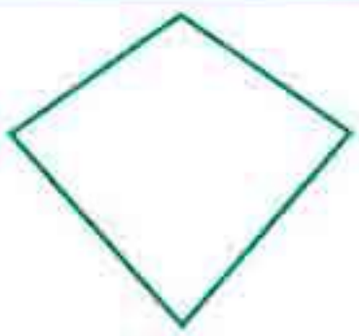


.....

k

.....

l

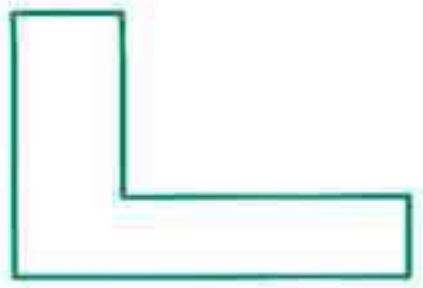


.....

m

.....

n

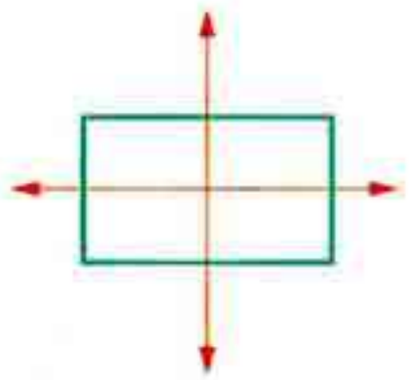


.....

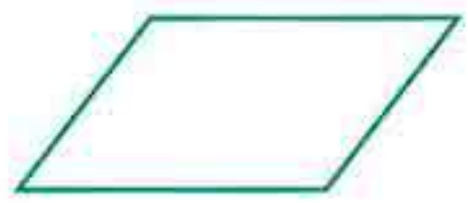
Lesson 2

3 In each of the following, if the figure is symmetrical, then draw all the lines of symmetry to it as in the example :

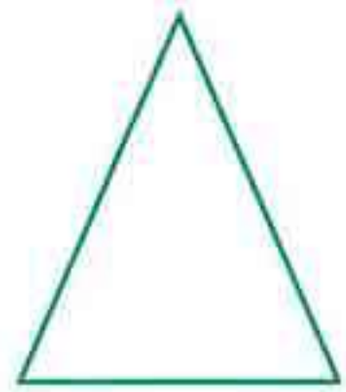
Example



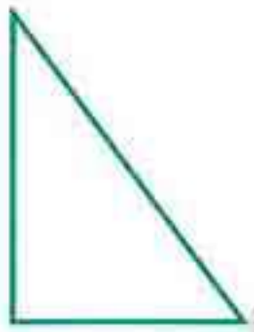
a



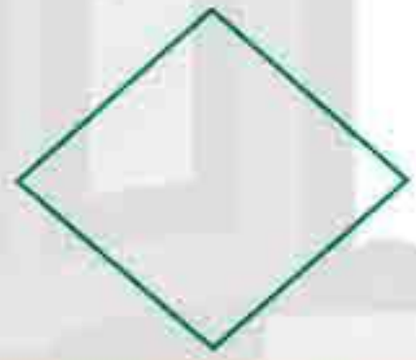
b



c



d



e

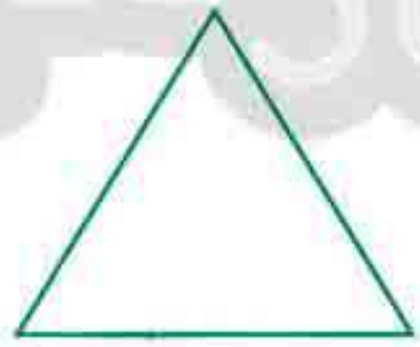
f

g

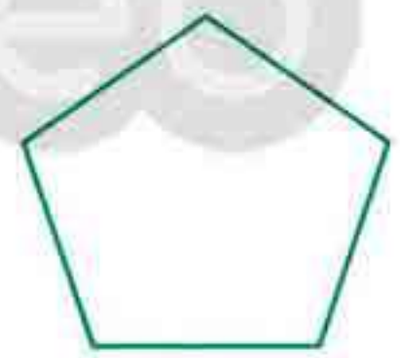
h

i

j

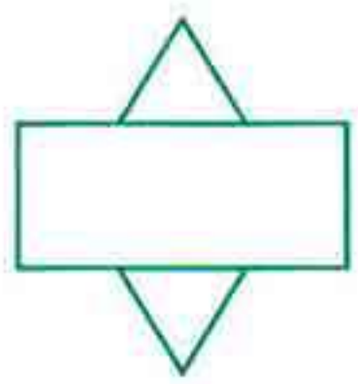


k

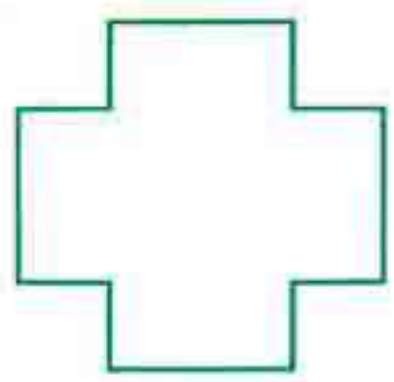


l

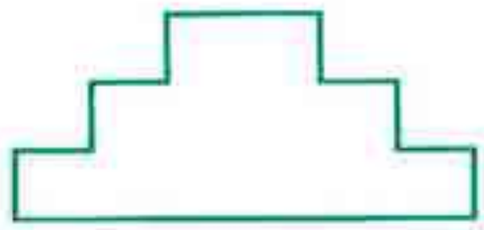
m



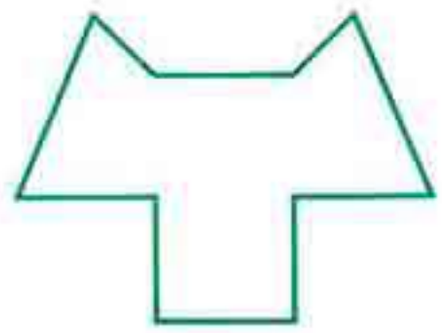
n



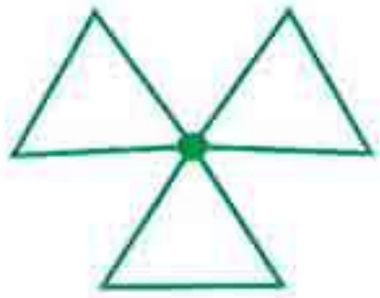
o



p

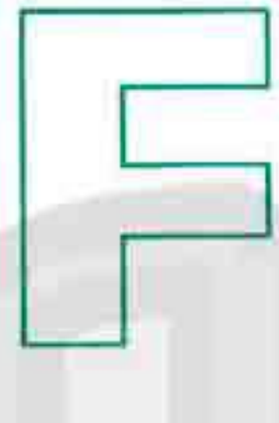


q



r

s



t

4 Join each figure to its number of lines of symmetry :

Zero

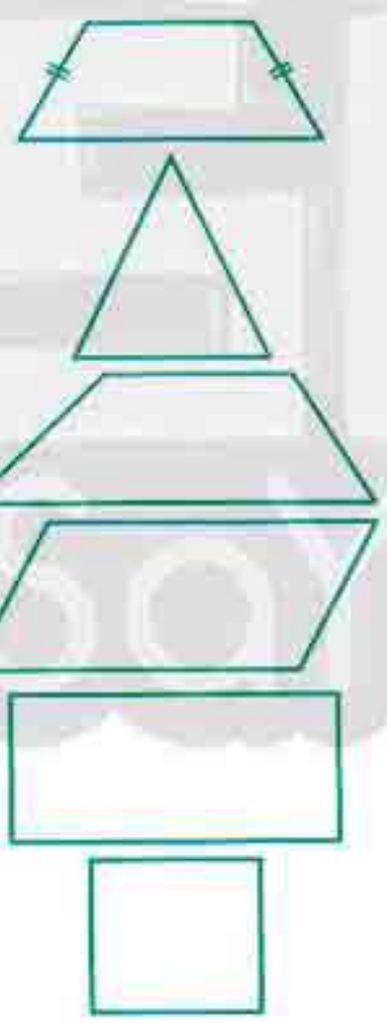
1

2

3

4

5



5 Complete the following :

a The isosceles triangle has ..... line(s) of symmetry.

b The equilateral triangle has ..... line(s) of symmetry.

c The isosceles trapezium has ..... line(s) of symmetry.

d The square has ..... line(s) of symmetry.

Lesson 2

e The rectangle has ..... line(s) of symmetry.

f The rhombus has ..... line(s) of symmetry.

g The regular pentagon has ..... line(s) of symmetry.

h The regular hexagon has ..... line(s) of symmetry.

i 📖 A diagonal of the rectangle divides it into two ..... triangles, but it is not ..... for the rectangle.

---

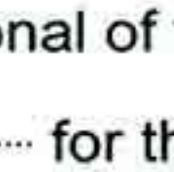
6 Choose the correct answer :

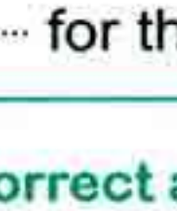
a The scalene triangle has ..... line(s) of symmetry. (2 or 0 or 1)

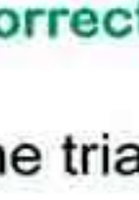
b The parallelogram has ..... line(s) of symmetry. (4 or 2 or 0)

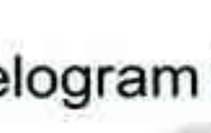
c Which of these figures has the greater number of lines of symmetry ?.....

(square or equilateral triangle or rectangle)

d This figure  has ..... line(s) of symmetry. (0 or 1 or 5)

e This figure  has ..... line(s) of symmetry. (4 or 1 or 2)

f This figure  has ..... line(s) of symmetry. (0 or 2 or 1)

g This figure  has ..... line(s) of symmetry. (1 or 0 or 2)

h In the opposite letters : K X B F

which ones have only one line of symmetry ?.....

(K and X or B and F or K and B)

---

7 📖 Put (✓) for the correct statement and (×) for the incorrect one and correct the wrong statement :

a The line of symmetry of a figure is that line dividing it into two congruent parts. ( )

b The parallelogram has four lines of symmetry. ( )

c The rectangle has four lines of symmetry. ( )

d The scalene triangle has three lines of symmetry. ( )

e The isosceles trapezium has one line of symmetry. ( )

f The square has four lines of symmetry. ( )

g The rhombus has four lines of symmetry. ( )

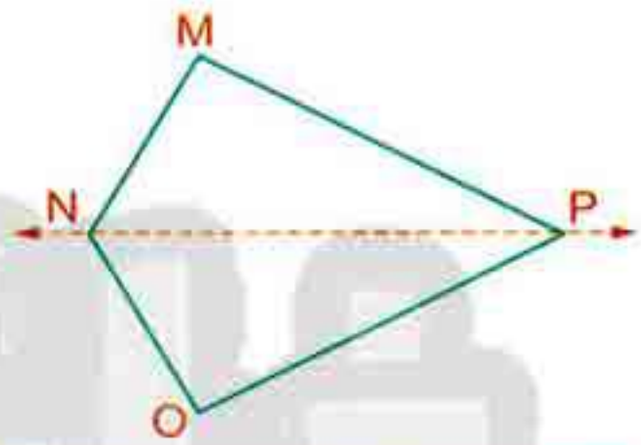
---

8 **In the opposite figure , the dashed line is a line of symmetry . Complete :**

a MN = ...

b OP = ...

c m (∠ NOP) = m (∠ .....)



---

9 **In the opposite figure , the dashed line is a line of symmetry . Complete :**

a XY = ...

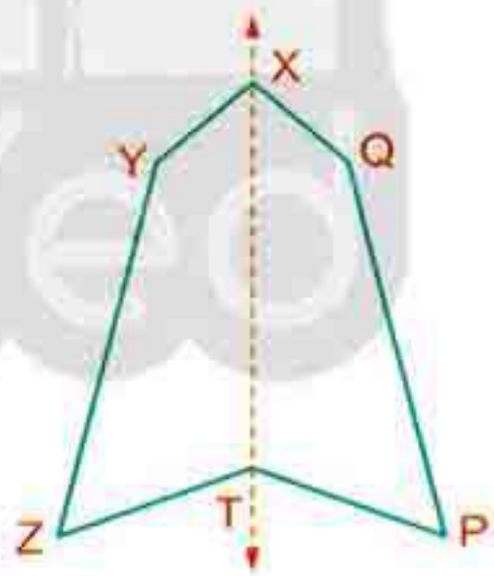
b QP = ...

c ZT = ...

d m (∠ XYZ) = m (∠ .....)

e m (∠ QPT) = m (∠ .....)

f m (∠ ZTX) = m (∠ .....)

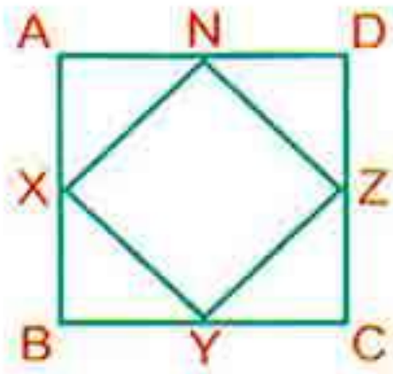


---

10 **In the opposite figure, ABCD is a square with midpoints of its sides X, Y, Z and N, notice the figure, then answer the following questions :**

a Draw a common line of symmetry for the two squares.

b How many common lines of symmetry are there for the two squares ? (2 or 4 or 6)



Exercise 15

Visual patterns

From the school book

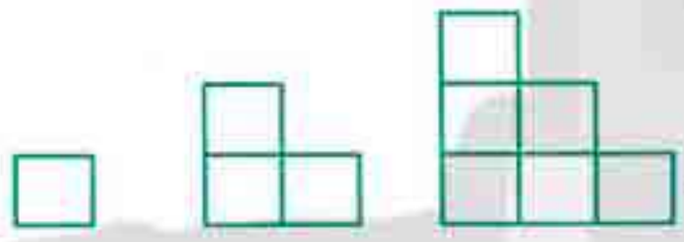
1 Discover the rule and find the next one :

a  .....

b  .....

c  .....

d  .....

e  .....

f  .....

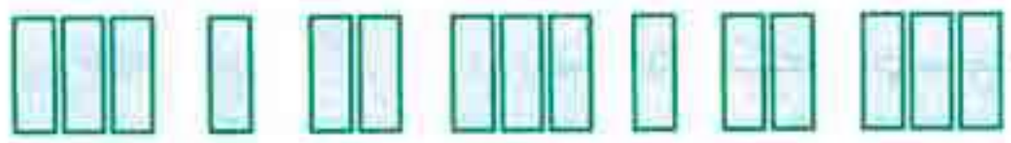
g  .....

h ABC ABC ABC .....

i SSTASSTASS .....

j AB , ABB , ABBB , AB , ABB , ... , ... , ...

k R M M C R R M M C R R M M C R .....

l  .....

m A , Z , B , Y , C , X , ... , ...

n  .....

o + + – + + – + ...

Lesson 3

p + × + × × + × × × + ...

q .....

r .....

s .....

t .....

u .....

v .....

w .....

x .....

2 **Discover the rule , then complete :**

a 6 , 13 , 20 , 27 , ... , ...

b 5 , 9 , 13 , 17 , ... , ...

c 1 , 2 , 4 , 8 , 16 , ... , ...

d 1 , 3 , 9 , 27 , ... , ...

e 2 , 7 , 4 , 9 , 6 , 11 , ... , ...

f 12 , 9 , 6 , ... , ...

g $\frac{1}{3}$, $\frac{2}{9}$, $\frac{4}{27}$, ... , ...

3 **Discover the rule , then complete :**

a 17.1 , 17.2 , 17.3 , ... , ... , ...

b 13.2 , 13.4 , 13.6 , ... , ... , ... , ...

c 16.4 , 16.8 , 17.2 , ... , ... , ...

d 10 , 9.6 , 9.2 , ... , ... , ...

e 1.2 , 2.3 , 3.4 , ... , ... , ...

f 2.2 , 3.3 , 4.4 , ... , ... , ...

g 12.3 , 23.4 , 34.5 , ... , ... , ...

Activities from the school book

Activity 1

In each of the following figures, discover the pattern, then complete by drawing one figure that follows the same pattern :

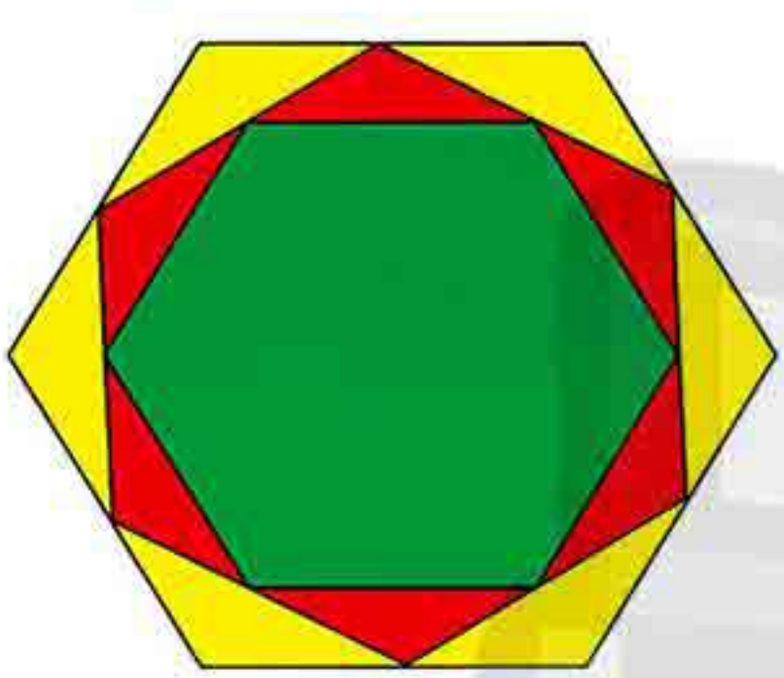
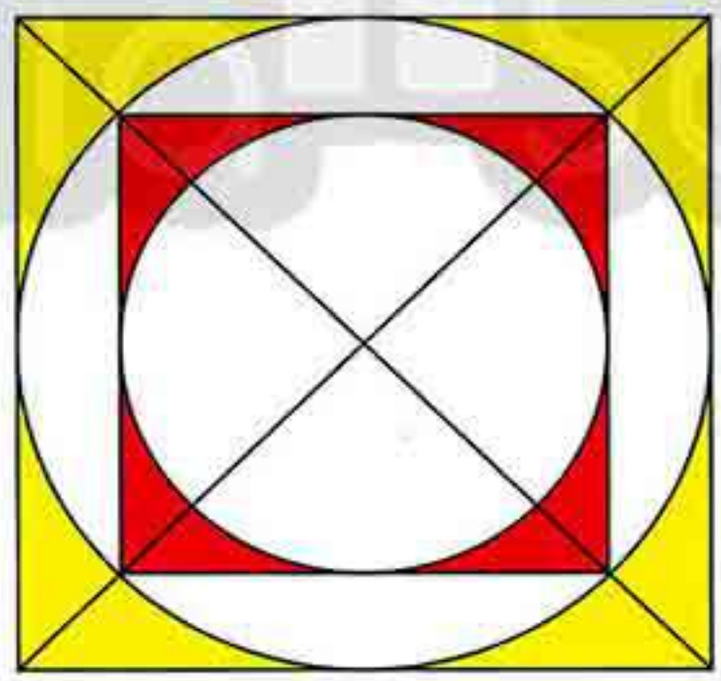


Figure (1)

Figure (2)

Activity 2

Discover the pattern, then draw two figures and complete colouring according to the pattern :



GENERAL EXERCISE

From the school book

Unit Two " Geometry "

1 Choose the correct answer from those given :

1 The number of the lines of symmetry of the rectangle = ...

a. zero b. 4 c. 2 d. 8

2 The number of lines of symmetry of the isosceles triangle is .....

a. 1 b. 2 c. 3 d. 4

3 There are ..... lines of symmetry of the square.

a. four b. three c. two d. one

4 The number of lines of symmetry of the rhombus is .....

a. four b. three c. two d. one

5 The isosceles trapezium has ..... line(s) of symmetry.

a. 3 b. 2 c. 1 d. 4

2 Complete each of the following :

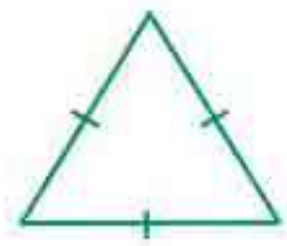
1 The two squares are congruent if the side length of one of them .....

2 The two polygons are congruent if their corresponding sides are .....
and their corresponding angles are .....

3 The number of lines of symmetry of the equilateral triangle = ...

4 The rhombus is a ..... figure , its sides are .....

5 In the opposite figure :
The number of lines of symmetry equals .....



6 10 , 9.6 , 9.2 , ... , ...

7 There are ..... lines of symmetry in the square.

3 Put the suitable relation (< , > or =) :

1 The number of lines of symmetry in the square ☐ the number of lines of symmetry in the rectangle.

2 The number of lines of symmetry of the square ☐ the number of lines of symmetry of the rhombus.

4 Put (✓) for the correct statement and (×) for the incorrect one :

1 It is possible that an acute-angled triangle is congruent to a right-angled triangle. ( )

2 The parallelogram has four lines of symmetry. ( )

3 It is not enough that the two polygons are congruent if the corresponding sides are equal in length only. ( )

4 The square has 4 lines of symmetry. ( )

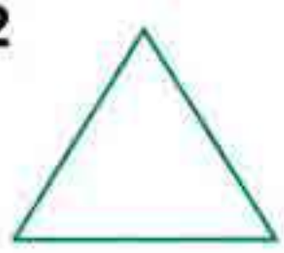
5 20 , 17 , 14 , 11 is a pattern of decreasing by 3 ( )

6 The rectangle has four lines of symmetry. ( )

5 Draw the lines of symmetry of each of the following shapes :

1

2



3

Test on Unit Two

1 Choose the correct answer from the given ones :

1 The rhombus has ..... lines of symmetry. (4 or 2 or 1 or 0)

2 If $\Delta ABC \equiv \Delta XYZ$, then $\overline{AB} \equiv$ ..... ($\overline{XY}$ or $\overline{YZ}$ or $\overline{XZ}$ or $\overline{BC}$)

3 If the polygon ABCD ≡ The polygon LMNO ,
then $\angle N \equiv \angle$ ..... (A or B or C or D)

4 The parallelogram has four lines of symmetry. (✓ or ✗)

5  ..... (in the same pattern)

( or  or  or )

6 The number of lines of symmetry of the isosceles triangle is .....
(1 or 2 or 3 or 4)

7 The square of side length 7 cm. is congruent to another square whose perimeter is ..... cm. (7 or 14 or 28 or 35)

8 The number of lines of symmetry of the square ☐ the number of lines of symmetry of the rectangle. (> or = or <)

2 Complete each of the following :

9 Two polygons are congruent if their corresponding ..... are equal in length and their corresponding angles are ..... in measure.

10 $\frac{1}{3}$, $\frac{2}{9}$, $\frac{4}{27}$, ... , ... (in the same pattern)

11 The isosceles trapezium has ..... line(s) of symmetry.

12 If $\Delta ABC \equiv \Delta XYZ$, then AC = ...

TEST ?

3 Answer the following :

13 In the opposite figure :

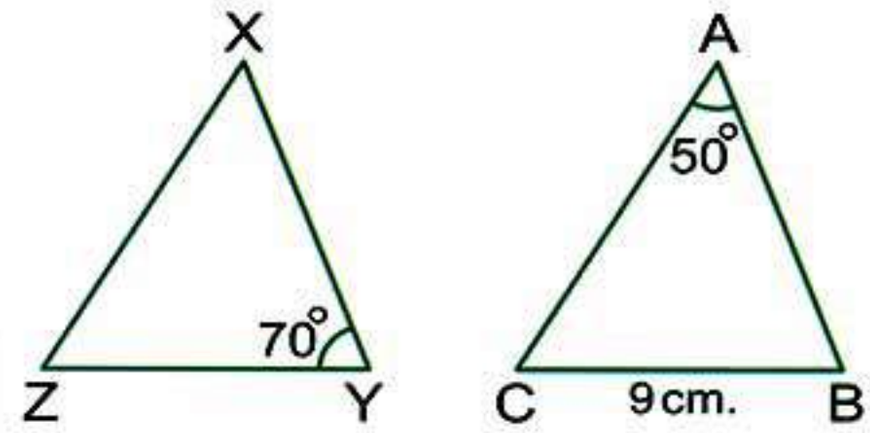
If $\Delta ABC \equiv \Delta XYZ$, then complete :

a. $\overline{AB} \equiv$ .....

b. m ($\angle C$) = ...°

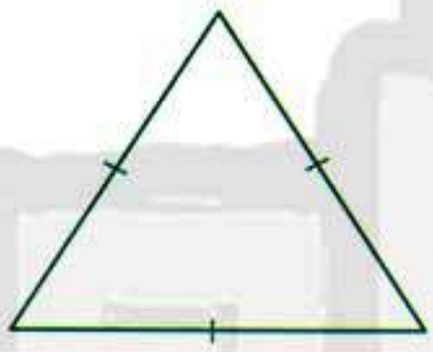
c. $\overline{ZY} \equiv$ .....

d. ZY = ... cm.

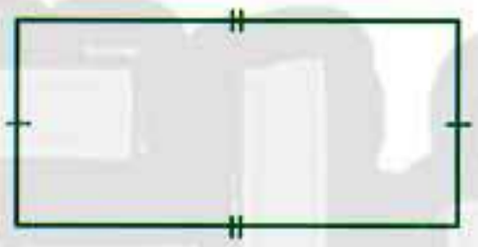


14 Draw the lines of symmetry of the following shapes :

a.



b.



Exercise 16

Capacity

From the school book

1 Arrange the following objects from the smallest capacity to the greatest capacity as in the example :

Example


1


3


2

a


.....


.....


.....

b


.....


.....


.....

c


.....


.....


.....

Lesson 1

d

.....

.....

.....

e

.....

.....

.....

2 Choose the better estimate of capacity as in the following example :

Example

5 mL or 5 L

a

250 L or 250 mL

b

8 L or 8 mL

c

150 mL or 150 L

d

1 mL or 1 L

e

5 mL or 5 L

f

1 mL or 1 L

g

450 L or 450 mL

h

10 L or 10 mL

3 **Choose the suitable measuring unit for each of the following.**

Write litre or millilitre as in (a) :

a Medicine in a spoon (millilitre)

b Juice in a glass (.....)

c Medicine in a bottle (.....)

d Water in a washing machine (.....)

e Water in an aquarium (.....)

f Shampoo in a bottle (.....)

g Milk in a baby's bottle (.....)

h Gasoline in a car (.....)

i Water in a swimming pool (.....)

j Water in a mug (.....)

k Paint in a bucket (.....)

l The amount of water used by a person for bathing (.....)

m The amount of juice in a family-size can (.....)

---

4 **Choose the answer nearest to the correct from between brackets :**

a The amount of water in a small cup of water .....

(3 millilitres or 150 millilitres or 700 millilitres)

b The amount of medicine in a small ampule .....

(15 millilitres or 150 millilitres or $\frac{1}{4}$ litre)

c The amount of water necessary for washing a car .....

($\frac{1}{2}$ litre or 15 litres or 150 litres)

d The amount of water necessary for washing two dishes .....

(1 500 millilitres or 50 millilitres or 20 litres)

e The amount of water for filling a bottle .....

(5 millilitres or 1 500 millilitres or 20 litres)

Lesson 1

f The amount of milk used by a family of four persons is .....

(500 litres or 2 000 millilitres or 50 litres)

g What is the capacity of a glass of water ? .....

(3 litres or 25 litres or 250 millilitres)

h Eman bought a bottle of medicine of capacity .....

($\frac{1}{5}$ litre or 2 litres or 1 000 millilitres)

i We have a water tank of capacity .....

(200 millilitres or 50 litres or 50 millilitres)

j I used about ..... of water in bathing today.

(50 litres or $\frac{1}{2}$ litre or 10 litres)

---

5 **Complete as in (a) :**

a 2 litres = 2 000 millilitres.

b 6 litres = ... millilitres.

c 4 000 millilitres = ... litres.

d 20 litres = ... millilitres.

e 7 000 mL = ... L

f $7\frac{1}{2}$ litres = ... millilitres.

g 1 400 mL = ... L

h 1 205 mL = ... L

i 20 mL = ... L

j $1\frac{1}{4}$ L = ... mL

k 24 L = ... mL

l $5\frac{1}{2}$ L = ... mL

m 10 000 mL = ... L

n ..... L = 3 500 mL

o 8 500 mL = ... L

p ..... L = 9 750 mL

q 2 dm^3 = ... mL

r 7 litres = ... cm^3

6 **Choose the correct answer :**

a The unit of measuring capacity is ..... (cm. or litre or m.)

b 1 litre = ... (1 cm^3 or 1 dm^3 or 100 cm^3)

c 1 millilitre = ... cm^3 (1 000 or 100 or 1)

d 900 millilitres = ... litres (9 or 90 or 0.9)

e 82 000 millilitres = ... litres. (82 000 or 820 or 82)

f 6 750 millilitres = ... litres. (675 or $67\frac{1}{2}$ or $6\frac{3}{4}$)

g 10 millilitres = ... dm^3 (0.01 or 0.1 or 0.001)

h 750 cm^3 = ... L ($\frac{1}{2}$ or $\frac{1}{4}$ or $\frac{3}{4}$)

7 **Put (✔) for the correct statement and (✗) for the incorrect one :**

a 2 dm^3 = 2 mL ( )

b 7 500 mL = 7.5 L ( )

c 7 000 mL = 7 L ( )

d 1 mL = $\frac{1}{10}$ L ( )

e $1\frac{1}{4}$ L = 1 250 mL ( )

8 **Complete :**

a 3 litres , 300 cm^3 = ... mL

b 3 000 mL , 20 dm^3 = ... L

c $2\frac{1}{4}$ litres , 750 mL = ... dm^3

d $8\frac{3}{4}$ litres , 7 dm^3 = ... mL

e $5\frac{1}{2}$ dm^3 , 300 cm^3 = ... mL

f 1 900 mL , 1 100 cm^3 = ... L

Lesson 1

9 Put the suitable relation (< , > or =) :

a 2 litres ☐ 1 500 millilitres.

b 📖 $\frac{1}{4}$ litre ☐ 245 millilitres.

c 1 L ☐ 1 dm^3

d $1\frac{1}{4}$ L ☐ 1 500 mL

e 500 mL ☐ 1 dm^3

f 2 000 cm^3 ☐ 2 litres.

g 📖 750 millilitres ☐ $\frac{3}{4}$ litre.

h 4 000 mL ☐ 40 L

i 📖 500 millilitres ☐ $\frac{1}{3}$ litre.

j 7 dm^3 ☐ 700 cm^3

k 9 000 mL ☐ 10 L

l $\frac{3}{4}$ L ☐ 750 dm^3

---

10 Circle the greatest measurement in each of the following cases :

a $\frac{1}{4}$ litre - 301 millilitres - 1 litre

b 4 litres - 5 000 millilitres - 2 999 millilitres

c 8 304 millilitres - 7 994 millilitres - $6\frac{1}{2}$ litres

d 14 450 millilitres - 13 499 millilitres - $14\frac{1}{2}$ litres

---

11 Arrange the quantities in an ascending order in each of the following cases :

a 3 000 millilitres , 2 litres and $3\frac{1}{2}$ litres

The order is : ..... , ... and .....

b 10 L , 30 mL , 2 000 mL , 30 L and 3 mL

The order is : ..... , ... , ... , ... and .....

c $2\frac{1}{4}$ L , 2 099 mL , 3 L and $2\frac{3}{4}$ L

The order is : ..... , ... , ... and .....

12 **Arrange the quantities in a descending order in each of the following cases :**

a 250 mL , 1 L , 1 250 mL and $\frac{1}{2}$ L

The order is : ..... , ... , ... and .....

b 8.75 litres , 9 000 millilitres , 5 litres and 6 500 millilitres

The order is : ..... , ... , ... and .....

c 10 L , 9 900 millilitres , $12\frac{1}{2}$ L and 7 000 cm^3

The order is : ..... , ... , ... and .....

---

13 **The capacity of each of the following measuring cups is 2 litres. How much liquid is in each jug ? complete.**

a

..... millilitres.

b

..... millilitres.

c

..... litre.

d

..... litre.

e

..... litre.

f

..... litre.

Lesson 1

14 The capacity of each of the following measuring cups is 2 litres.
Colour the measuring cup to express the indicated amount :

a

1 700 millilitres

b

300 millilitres

c

900 millilitres

d

$1\frac{1}{2}$ litre

e

$\frac{3}{4}$ litres

f

$1\frac{1}{4}$ litres

15 If 5 drops of water make 1 mL , then how many drops make 1 L ?

.....

16 A cup holds 250 mL , how many cups would it take to make 1 L ?

.....

17 A bucket holds 6 litres of water. After rain, it was one third full.
How many litres of water were in the bucket ? How many mL ?

.....

18 Karim filled a bowl with 5 glasses of water. If each glass had a capacity of 300 mL, how many millilitres of water did the bowl hold ?

.....

19 **Use mental math. to answer the questions :**

a One large glass holds 300 mL, do 3 glasses hold more or less than 1 L ?

.....

b A small juice can holds 150 mL, do 5 juice cans hold more or less than 1 L ?

.....

20 **Uncle Wael has a lot of containers. Help him decide which container he should use to hold each type of juice. Write the letters in the boxes :**

		Container
1	Two and thirty-eight hundredths of a litre of apple juice.	
2	One and sixty-seven hundredths of a litre of guava juice.	
3	Seventy-nine hundredths of a litre of orange juice.	
4	Two and seven tenths of a litre of pineapple juice.	
5	Sixty hundredths of a litre of mango juice.	
6	Three and two hundredths of a litre of lemon juice.	

Exercise 17

Weight

From the school book

1 Circle the answer that gives the best estimate of the weight as in the example :

Example

(2 kg. or (300 gm.) or 4 gm.)

a

(5 000 gm. or 20 kg. or 2 tons)

b

(1 kg. or 10 gm. or 150 kg.)

c

($\frac{3}{4}$ ton or 1 000 gm. or 100 kg.)

d

(5 kg. or 700 gm. or 1 kg.)

e

(15 kg. or 50 gm. or 1 ton)

f

(1 kg. or 400 gm. or 1.5 kg.)

g

(800 gm. or 200 gm. or 20 gm.)

h

(100 gm. or 500 gm. or 800 gm.)

i

(5 kg. or 15 kg. or 25 kg.)

2 **Choose the suitable unit of weight to measure the given object :**

a A bicycle : ..... (grams or kilograms or tons)

b A rabbit : ..... (grams or kilograms or tons)

c A car : ..... (grams or kilograms or tons)

d A toothbrush : ..... (grams or kilograms or tons)

e An elephant : ..... (grams or kilograms or tons)

f A rat : ..... (grams or kilograms or tons)

g A spoon of sugar : ..... (grams or kilograms or tons)

h A cow : ..... (grams or kilograms or tons)

i An envelope : ..... (grams or kilograms or tons)

j A pencil : ..... (grams or kilograms or tons)

k A desk : ..... (grams or kilograms or tons)

l A paper clip : ..... (grams or kilograms or tons)

m A loaf : ..... (grams or kilograms or tons)

n A cup : ..... (grams or kilograms or tons)

o A bear : ..... (grams or kilograms or tons)

3 **Choose the suitable weight for :**

a A jar of jam : ..... (50 kilograms or 5 grams or 500 grams)

b An apple : ..... (10 grams or 150 grams or 1 kilogram)

Lesson 2

c A toy car : ..... (2 grams or 10 grams or 700 grams)

d A dining room chair : ..... (6 grams or 6 kilograms or 6 tons)

e A cat : ..... (5 kilograms or 500 grams or 50 kilograms)

f A truck : ..... (2 tons or 20 kg. or 3 500 gm.)

g Your father : ..... (1 ton or 95 kg. or 80 gm.)

h A golden bracelet : ..... (2 tons or 10 grams or 2 kg.)

i Watermelon : ..... (3 gm. or 3 kg. or 3 tons)

j Spoon : ..... (50 gm. or 50 kg. or 1 gm.)

k Cheese burger sandwich : ..... (180 gm. or 180 kg. or 18 gm.)

l Bag of flour : ..... (3 gm. or 3 kg. or 3 tons)

m Bicycle : ..... (15 gm. or 15 kg. or 500 kg.)

4 Complete as in number (a) :

a 3 tons = 3 000 kilograms.

b 7 240 kilograms = ... tons.

c 75 kilograms = ... grams.

d 12 000 grams = ... kilograms.

e 7 tons = ... grams.

f 500 000 grams = ... ton.

g 70 kg. = ... gm.

h 4 500 gm. = ... kg.

i 1 kg. = ... ton.

j 1 gm. = ... kg.

k 60 gm. = ... kg.

l 5 000 gm. = ... ton.

m 1 000 gm. = ... ton.

n 10 tons = ... kg.

o ..... kg. = 1 900 gm.

p ..... tons = 4 750 kg.

q $\frac{1}{2}$ kg. = ... gm.

r $4\frac{1}{2}$ tons = ... kg.

5 Complete as in number (a) :

a 6 230 gm. = 6 kg. and 230 gm.

b 3 715 gm. = ... kg. and ..... gm.

c 73 102 gm. = ... kg. and ..... gm.

d 9 251 kg. = ... tons and ..... kg.

e 53 kg. and 8 gm. = ... gm.

f 6 kg. and 32 gm. = ... gm.

6 Complete:

a $6\frac{1}{4}$ kg. + 200 gm. = ... gm.

b $7\frac{1}{2}$ kg. + 250 gm. = ... gm.

c $6\frac{3}{4}$ kg. + 250 gm. = ... kg.

d $1\frac{3}{4}$ kg. + 50 gm. = ... gm.

e $9\frac{1}{4}$ kg. + 750 gm. = ... gm. = ... kg.

7 Choose the correct answer between brackets:

a 4 kg. and 700 gm. = ... gm. (4 070 or 4 700 or 4 007)

b $6\frac{1}{2}$ kg. = ... gm. (650 or 6 005 or 6 500)

c $2\frac{3}{4}$ kg. = ... gm. (2 250 or 2 500 or 2 750)

d 6 020 gm. = 6 kg. + ... gm. (2 or 200 or 20)

e 1 kg. and 750 gm. = ... kg. (2 or $1\frac{1}{4}$ or $1\frac{3}{4}$)

Lesson 2

8 **Put the suitable relation (< , > or =) :**

a kg. ☐ ton.

b kilogram ☐ gram.

c 500 kg. ☐ 1 ton.

d 10 tons ☐ 10 000 kg.

e $3\frac{1}{4}$ kg. ☐ 3 250 gm.

f 9 750 kg. ☐ 9 tons.

g 750 gm. ☐ $\frac{1}{2}$ kg.

h $6\frac{1}{2}$ tons ☐ 6 500 kg.

i 8 780 kg. ☐ 9 tons.

j 3 kg. ☐ 3 000 gm.

k 700 gm. ☐ 0.7 kg.

l 1 ton ☐ 1 million grams.

9 **Circle the greatest weight and underline the smallest one in each of the following as in number (a) :**

a 30 000 gm. - 2 tons - 2 100 kg.

b $2\frac{1}{2}$ kg. - 2 tons - 2 000 gm.

c $\frac{1}{2}$ ton - 3 kg. - 300 001 gm.

d 600 tons - 800 000 gm. - 7 000 kg.

e 2 490 gm. - 249 kg. - $\frac{1}{4}$ ton

f $\frac{3}{4}$ ton - 99 010 gm. - 99 kg.

10 **Arrange the following weights in an ascending order in each case :**

a Kilogram, gram and ton

The order is : ..... , ... and .....

b 3 kg. , 850 gm. , 2 kg. and $\frac{1}{2}$ kg.

The order is : ..... , ... , ... and .....

c 5 000 gm. , 7 kg. , $\frac{1}{2}$ ton and 120 kg.

The order is : ..... , ... , ... and .....

d 700 gm. , $\frac{1}{2}$ kg. , $1\frac{1}{2}$ kg. and 200 gm.

The order is : ..... , ... , ... and .....

e 12 500 gm. , 17 kg. , $1\frac{1}{2}$ ton and 700 gm.

The order is : ..... , ... , ... and .....

11 Look at the scales, then write the weight in each of the following cases :

a

..... kg.

b

..... kg.

c

..... kg.

12 Look at the reading on the weighing scales in each of the following cases and complete :

a

..... kg.

b

..... kg.

c

..... gm.

d

..... gm.

Lesson 2

13 Dina is six years old. She weighs herself. Look at the reading on the scales. How much does she weigh ? "choose"

a 12 kg.

b 12.8 kg.

c 83 kg.

d 80 kg.

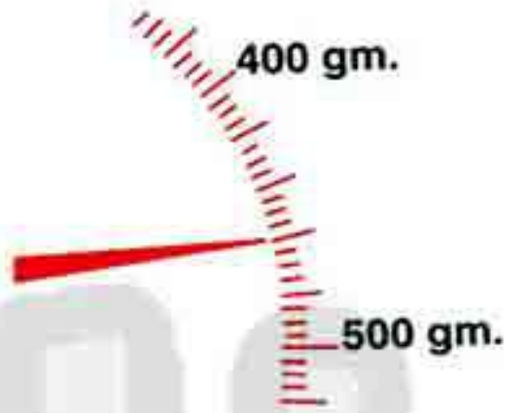
14 A parcel is weighed at the post office and gives the reading shown in the picture. How much does it weigh ? "choose"

a 403 gm.

b 460 gm.

c 412 gm.

d 480 gm.



15 Wiaam has weighed a tin of potatoes on some digital scales. What is the reading ? "choose"

a 1.172 kg.

b 1.172 gm.

c 172 gm.

d 172 kg.

Real Life Problems

a Nabila bought 3 kilograms of oranges for P.T. 200 each and 2 kilograms of grapes for P.T. 300 each. How much money did she pay ?

.....

b Farah bought 2 kilograms and a half of green beans and two kilograms and a quarter of potatoes. How many grams did Farah carry ?

.....

c 🕮 The price of 1 kg. of meat is L.E. 35 A family eats one and a half kilograms of meat every week. How much money does this family pay for meat in a month ?

.....

d 🕮 A family of 5 persons eats 2 kg. of fish every week. The price of fish is L.E. 15 for a kilogram. How much money does this family pay for fish in a month ?

.....

e If one lunch box weighs 425 grams, will 3 lunch boxes be more or less than one kilogram ? what is the total weight of the 3 lunch boxes ?

.....

f 🕮 A man bought 8 tons of iron for building his family house. If the price of 1 kilogram of iron is four and half pounds. Find :

1. the price of one ton of iron.
2. the money paid for the iron he bought.

g 🕮 A family of 7 persons eat monthly 5 kilograms of bananas , 2 kilograms of apples and 6 kilograms of oranges. The price for one kg. as shown are L.E. 3 for oranges, L.E. 8 for apples , L.E. 4 for bananas and L.E. 2 for guavas.

Answer the following :

1. How much money does this family pay for fruits ?
2. If the family wants to pay less money , but get the same amount of fruits , what will they do ?

Exercise 18

Time

From the school book

1 Choose the suitable unit of time to measure the given event :

a A football match : ..... (seconds or hours or days)

b Building a house : ..... (seconds or hours or days)

c Brushing your teeth : ..... (seconds or days or minutes)

d Travelling from Cairo to Alexandria by train : .....

(seconds or minutes or hours)

---

2 Complete :

a Some units of measuring time are ..... , ... , ... and .....

b (1) 1 day = ... hours and 1 hour = ... day.

(2) 1 hour = ... minutes and 1 minute = ... hour.

(3) 1 minute = ... seconds and 1 second = ... minute.

c (1) 1 day = ... hours = ... × ..... minutes = ... minutes.

(2) 1 hour = ... minutes = ... × ..... seconds = ... seconds.

(3) 1 day = ... minutes = ... × ..... = ... seconds.

---

3 Complete :

a 1 hour = ... minutes.

b 2 hours = ... minutes.

c 3 hours = ... minutes.

d 120 minutes = ... hours.

e $\frac{1}{4}$ hour = ... minutes.

f 1 minute = ... hour.

g $\frac{1}{3}$ hour = ... minutes.

h $\frac{1}{2}$ hour = ... minutes.

i 1 hr. and 40 min. = ... min.

j 2 hr. and 30 min. = ... min.

k $2\frac{1}{3}$ hours = ... minutes.

l 270 minutes = ... hours.

m 135 minutes = ... hours.

n 240 minutes = ... hours.

o 2 hr. and 5 min. = ... min.

p 330 minutes = ... hours.

q $3\frac{1}{2}$ hours = ... minutes.

r $4\frac{3}{4}$ hours = ... minutes.

4 **Complete :**

a 1 minute = ... seconds.

b 2 minutes = ... seconds.

c $1\frac{1}{2}$ minutes = ... seconds.

d 180 seconds = ... minutes.

e 240 seconds = ... minutes.

f 300 seconds = ... minutes.

g 1 hour = ... seconds.

h $2\frac{1}{4}$ minutes = ... seconds.

5 **Complete :**

a 1 day = ... hours.

b 2 days = ... hours.

c $\frac{1}{2}$ day = ... hours.

d $\frac{1}{4}$ day = ... hours.

e $\frac{1}{3}$ day = ... hours.

f $\frac{2}{3}$ day = ... hours.

g $1\frac{1}{2}$ day = ... hours.

h $2\frac{1}{2}$ days = ... hours.

i $2\frac{1}{4}$ days = ... hours.

j 48 hours = ... days.

k 36 hours = ... days.

l 72 hours = ... days.

m 16 hours = ... day.

n 30 hours = ... days.

o 1 day = ... minutes.

p $\frac{1}{4}$ day = ... minutes.

q 2 days and 16 hours = ... hours.

Lesson 3

r 3 days and 8 hours = ... hours.

s 1 week = ... hours.

t $3\frac{1}{2}$ days = ... hours.

---

6 **Complete :**

a 60 minutes and 167 hours = ... days.

b 720 minutes and 96 hours = ... days.

c 5 days and 6 hours = ... minutes.

d 3 days and 180 minutes = ... hours.

e 4 days and 1 800 seconds = ... hours.

f $1\frac{2}{3}$ hours and 20 minutes = ... seconds.

---

7 **Put the suitable relation (< , > or =) :**

a 1 day ☐ 24 hours.

b 2 days ☐ 50 hours.

c $\frac{1}{2}$ day ☐ 10 hours.

d $\frac{1}{3}$ day ☐ 12 hours.

e 📖 $\frac{3}{4}$ hour ☐ 50 minutes.

f 📖 72 hours ☐ three days.

g 📖 $2\frac{1}{3}$ hours ☐ 150 minutes.

h 📖 $\frac{2}{3}$ hour ☐ 2 600 seconds.

i $\frac{1}{2}$ hour ☐ 1 800 seconds.

j $1\frac{1}{2}$ day ☐ 40 hours.

k 57 hours ☐ 2 days and 9 hours.

l 60 hours ☐ 2 days and an hour.

m 29 hours ☐ 1 day and 5 hours.

n 48 hours ☐ 1 day and 23 hours.

o 1 hour ☐ 59 minutes and 60 seconds.

p $\frac{1}{4}$ day ☐ 21 600 seconds.

q 📖 120 seconds ☐ 3 minutes.

r 📖 2 hours ☐ 9 000 seconds.

s 📖 $\frac{1}{10}$ hour ☐ 360 seconds.

8 **Circle the greatest time and underline the smallest one in each case :**

a 14 000 seconds , 250 minutes and 7 hours

b 30 000 minutes , 498 hours and 20 days

c 8 600 seconds , 140 minutes and $2\frac{1}{2}$ hours

d 4 700 minutes , 80 hours and $3\frac{1}{4}$ days

e 19 100 seconds , 330 minutes and $5\frac{1}{3}$ hours

f 14 000 minutes , 210 hours and 10 days

9 **Arrange the following in an ascending order :**

a 2 days , 42 hours and 2 160 minutes

The order is : ..... , ... and .....

b 3 600 seconds , 2 hours , 240 minutes and $\frac{1}{4}$ a day

The order is : ..... , ... , ... and .....

c 📖 1 440 minutes , 3 600 seconds , $\frac{1}{3}$ a day and $\frac{1}{8}$ a day

The order is : ..... , ... , ... and .....

d 📖 300 minutes , 19 000 seconds and 4 hours

The order is : ..... , ... and .....

Lesson 3

e $\frac{1}{3}$ a day , 20 hours , 4 800 minutes and 6 000 seconds

The order is : ..... , ... , ... and .....

---

10 **Arrange the following in a descending order :**

a 15 hours , $\frac{2}{3}$ a day , 240 minutes and 3 600 seconds

The order is : ..... , ... , ... and .....

b 1 week , 72 hours , 10 days and 3 600 minutes

The order is : ..... , ... , ... and .....

c 📖 $\frac{2}{3}$ day , 18 hours and 1 020 minutes

The order is : ..... , ... and .....

---

11 **Choose the suitable answer between brackets :**

a Drinking a cup of water : ..... (30 seconds or 5 minutes or $\frac{1}{2}$ hour)

b Reading a short story : ..... (30 seconds or 30 minutes or 30 hours)

c Watching a movie : ..... (50 seconds or 20 minutes or $1\frac{1}{2}$ hour)

d Eating lunch : ..... (20 seconds or 30 minutes or 5 hours)

e The period that the pupil stays at a school day : .....

(57 seconds or 47 minutes or 7 hours)

f Doing your homework : ..... ($\frac{1}{2}$ a day or 3 hours or 3 seconds)

g A person sleeps daily for about : .....

(500 seconds or 500 minutes or 100 minutes)

h An employee works daily for : .....

(48 minutes or $\frac{1}{2}$ a day or 360 seconds)

12 **Underline the correct answer :**

a How many hours and minutes are in 125 minutes ?

(2 hours and 25 minutes or 1 hour and 20 minutes or 2 hours and 5 minutes)

b How many hours are in a week ? (46 or 168 or 120)

c How many hours and minutes are in 190 minutes ?

(3 hours and 20 minutes or 3 hours and 10 minutes or 2 hours and 10 minutes)

d The total number of days and hours in (4 days , 16 hours + 7 days , 11 hours) is : .....

(11 days and 3 hours or 12 days and 7 hours or 12 days and 3 hours)

e There are 52 weeks in one year. How many weeks are there in 2 and half years ? (130 or 104 or 156)

13 **Answer each of the following questions :**

a Karima walked one kilometre in 9 minutes. How long would it take her to walk 7 kilometres at the same speed ?

.....

b It takes 17 minutes to clean a car. How long would it take to clean 23 cars ?

.....

c The school holiday starts after three weeks. School is opened 6 days a week. How many school days are left until the holiday ?

.....

.....

d The football match started at 2 : 30 pm. Each half was 45 minutes. What time did the first half end ?

.....

Lesson 3

e 📖 Mona used to ride her bike in the weekends. Once she rode it at  and finished at  For how long did she ride her bike on that day ?

.....

f Samy spent 45 minutes doing his homework last night. He started it at 8 : 30 pm. What time did he finish his homework ?

.....

g 📖 If Mazen's birthday was on 17 - 5 - 1999, what would his age be on 1 - 10 - 2009 ?

.....

h 📖 An engineer works for 8 hours daily in an investment company. His salary is L.E. 10 in an hour , find his salary:

(1) In a week.

(2) In 7 weeks (he works 5 days a week)

.....

Activities from the school book

Activity 1

10 litres

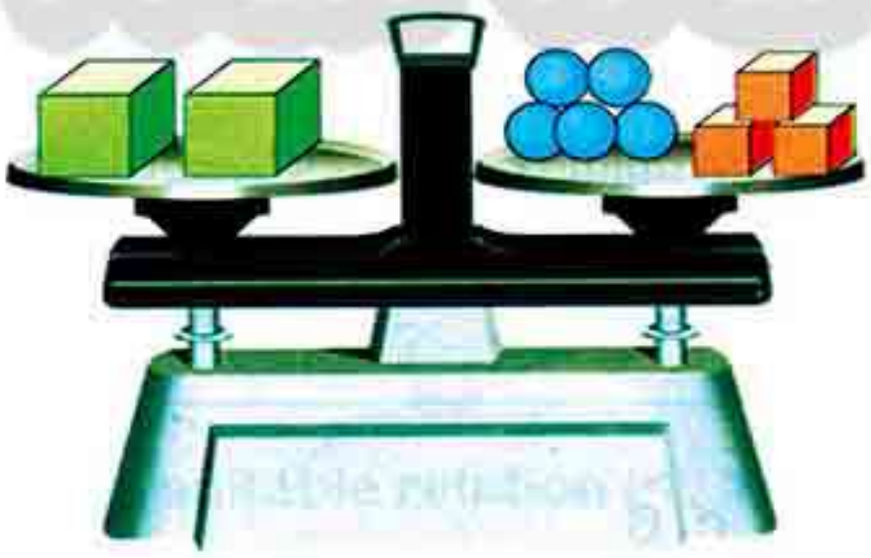
7 litres

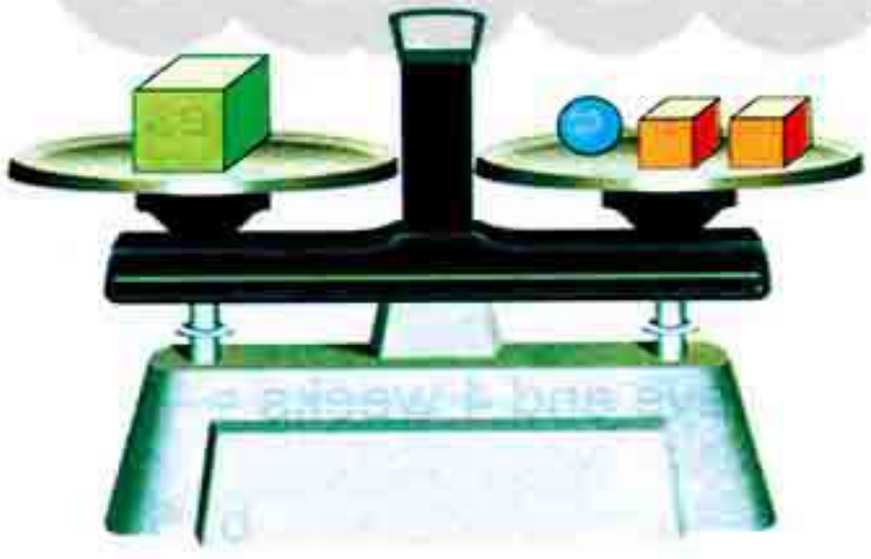
3 litres

We have three pots of capacities 10 litres, 7 litres and 3 litres.
The largest pot is completely full of water and the other two pots are empty.
Using the least number of steps, show how you use the three pots for dividing the water into two equal halves, putting five litres in the middle pot and five litres in the large pot.

Activity 2

If the two pans of the shown balance have the same weight in each of the two cases, answer the following questions :





a What is the relation between the weight of the small cube and the weight of the ball ?

b What is the relation between the weight of the large cube and the weight of the ball ?

GENERAL EXERCISE

From the school book

Unit Three " Measurement "

1 Choose the correct answer from those given :

1 $\frac{2}{3}$ a day = ... hour.

a. 16 b. 15 c. 6 d. 18

2 The third of a day = ... hours.

a. 12 b. 3 c. 8 d. 15

3 4.5 tons = ... kg.

a. 45 b. 54 c. 4 500 d. 5 400

4 One day = ... minutes.

a. 3 600 b. 60 c. 24 d. 1 440

5 14 days and 4 weeks = ... weeks.

a. 4 b. 5 c. 6

6 25 decimetre cube = ...

a. $\frac{15}{5}$ litre b. 25 litre c. $\frac{1}{4}$ litre d. 25 millilitre

7 The litre is the capacity of a vessel in the shape of a cube with edge length = ...

a. 1 cm. b. 10 cm. c. 100 cm. d. 1 000 cm.

8 $\frac{3}{4}$ of the day = ... minutes.

a. 1 080 b. 180 c. 100 d. 1 800

9 $\frac{1}{2}$ litre = ... cm^3.

a. 500 b. 5 000 c. 50 d. 50 000

2 Complete each of the following :

1 $3\frac{1}{4}$ kg. = ... gm.

2 4 750 millilitres = ... litre.

3 5 tons = ... kg.

4 8 500 millilitres = ... litre.

5 540 piasters = ... pounds.

6 The third of the day = ... hours

7 The litre = ... millilitres.

8 The minute = ... seconds.

3 Put the suitable relation (< , > or =) :

1 $\frac{3}{4}$ hour ☐ 75 minutes.

2 5 tons ☐ 5 000 gm.

3 $4\frac{3}{4}$ pounds ☐ 475 piasters.

General Exercise

4 0.5 kg. ☐ 750 gm.

5 $\frac{1}{3}$ of the day ☐ 7 hours.

6 9 800 millilitres ☐ 9.8 litres.

7 84 hours ☐ 5 days.

8 5 400 piasters ☐ 54 pounds.

9 The litre ☐ 100 millilitres.

10 100 gm. ☐ 1 kg.

11 8 780 kg. ☐ 9 ton

12 1.25 litre ☐ 1 200 mL.

13 4 pounds ☐ 475 piasters.

4 **Arrange ascendingly :**

1 37 hours , 1.5 day , 2 225 minutes

2 4 litres , 4 700 millilitre , 4.5 dm^3.

3 8 750 kg. , 9 ton. , 870 000 gm.

5 A man bought 8 tons of iron for building a house. If the price of one kg. of iron is 4 pounds. Find :

a The price of one ton of iron.

b The price of the quantity of iron which the man bought.

Test on Unit Three

1 Choose the correct answer from the given ones :

1 5 litres = ... millilitres. (50 or 500 or 5 000 or 50 0000)

2 48 hours ..... 3 days. (> or = or <)

3 3.5 tons = ... kg. (35 or 34 or 350 or 3 500)

4 250 cm^3 ..... $\frac{1}{4}$ litre. (> or = or <)

5 The weight of the school book = ...

(3 tons. or 300 gm. or 3 kg. or 30 kg.)

6 One day and half = ... hours. (24 or 36 or 48 or 30)

7 ..... is a unit of measuring weight.

(Litre or Kilogram or Hour or Minute)

8 120 minutes = ... hours. (1.5 or 2.5 or 2 or 3)

2 Complete each of the following :

9 4.5 kg. = ... gm.

10 Litre is a unit of measuring .....

11 7.2 litres = ... dm^3

12 $2\frac{1}{3}$ hours = ... minutes.

13 6 250 kg. = ... tons.

14 1 week = ... hours.

3 Answer the following :

15 Arrange the following quantities in a descending order :

2 000 mL , 20 L , $2\frac{3}{4}$ dm^3 and 3 000 cm^3

The order is : ..... , ... , ... and .....

16 A TV series started at 7 : 30 P.M. and took 45 minutes , when did it finish ?

It finished at .....

5 [a] ***Use the numbers : 5.3 , 8.3 , 10.03 , 5.13 and 5.313 to complete :*** ..... / 6

(1) The smallest number is .....

(2) The numbers that are greater than 5.5 are .....

[b] ***Write two numbers lying between 3.24 and 3.25***

The two numbers are ..... and .....

Sheet 7 From lesson (1) unit (1) to lesson (7) unit (1)

Mark ..... / 25

1 ***Complete :*** ..... / 5

[a] 1.6 + ... = 8.6

[b] 355 piastres = ... pounds.

[c] (530.64 – 2.371) + (894.7 – 89.58) = ...

[d] 75.02 < ..... < 75.022

[e] $\left(2\frac{2}{3} + \frac{1}{5}\right) - \frac{4}{5}$ = ...

2 ***Put (✓) for the correct statement and (×) for the incorrect one :*** ..... / 5

[a] 1.07 + 0.7 = 1.77 ( )

[b] $3\frac{1}{8}$ + 7.875 = 10 ( )

[c] 7 thousandths + 3 tenths = 0.037 ( )

[d] $\frac{17}{12}$ is a proper fraction. ( )

[e] The place value of the digit 7 in the number 9876.05 is tenths. ( )

3 ***Choose the correct answer :*** ..... / 5

[a] 0.04 + 4 + 0.4 = ... (4.08 *or* 4.008 *or* 4.44)

[b] 4.619 – 3.7 = ... (0.999 *or* 0.199 *or* 0.919)

[c] $\frac{1}{8}$ + 4.125 = ... (4.25 *or* 0.45 *or* 0.045)

[d] 7.32 – 1.93 ..... 6.78 – 0.42 (< *or* = *or* >)

[e] 25.9 = 5 + 0.9 + ... (20 *or* 2 *or* 200)

4 ***Find the result :***

[a] 17.43
+ 21.35
.....

[b] 82.06
– 36.095
.....

[c] 21.5
+ 5.42
+ 163.384
.....

[d] 612.5
– 157.125
.....

..... / 4

5 **[a]** ***Find the missing digits :***

(1) 3 . 2 □
+ 5 . □ 3
□ . 7 9

(2) 8 3 . 5 7
– □ □ . 7 3 4
2 4 . □ □ □

..... / 6

[b] If Mona has L.E. 3.95 and Manal has L.E. 6.3
How much money do they have together ?
.....

Sheet 8 — From lesson (1) unit (1) to lesson (8A) unit (1)

Mark ..... / 25

1 ***Complete :***

..... / 5

[a] 85 ≃ ..... (to the nearest 10)
[b] 4.9 ≃ ..... (to the nearest 10)
[c] 3.75 = 3 + ... + 0.05
[d] 218.16 ≃ ..... (to the nearest 10)
[e] 9 ≃ ..... (to the nearest 10)

2 ***Choose the correct answer :***

..... / 5

[a] 47 approximated to the nearest 10 is ..... (40 *or* 45 *or* 50)
[b] 953.4 approximated to the nearest 10 is .....
(950 *or* 960 *or* 955)
[c] 8.56 ≃ ..... (to the nearest ten) (10 *or* 9.56 *or* 9)
[d] 9 917 ≃ 9 920 approximated to the nearest .....
(100 *or* 1 000 *or* 10)
[e] $5\frac{1}{4}$ ..... 5.125 (< *or* = *or* >)

3 ***Complete using the suitable digits :***

[a] ☐ 8 ≃ 70 to the nearest ten.

[b] ☐ 5 ≃ 100 to the nearest ten.

[c] 35 ☐ 7 ≃ 3 ☐ 2 ☐ to the nearest ten.

[d] 6 ☐ 3 ≃ 650 to the nearest ten.

[e] ☐ ☐ 4 ≃ 740 to the nearest ten.

..... / 4

4 ***Find the result of the following approximated the result to the nearest ten :***

..... / 5

[a] 93 210 + 21 034 = ... ≃ .....

[b] 1 023.6 – 549.17 = ... ≃ .....

[c] 8 970 ÷ 100 = ... ≃ .....

[d] 5.423 + 9.577 = ... ≃ .....

[e] 3.303 – 0.3 = ... ≃ .....

5 [a] ***Write all the whole numbers which if approximated to the nearest ten , the result will be 200***

..... / 6

The numbers are : .....

[b] Ashraf bought a refrigerator for L.E. 1 346.4 and a stove for L.E. 925.8 Calculate what he paid approximating the result to the nearest 10

He paid = ... = L.E. ..... ≃ L.E. .....

Sheet 9 — From lesson (1) unit (1) to lesson (8B) unit (1)

Mark ..... / 25

1 ***Complete :***

..... / 5

[a] 76 ≃ ..... (to the nearest 100)

[b] 475.6 ≃ ..... (to the nearest 100)

[c] 6 905 m. = ... km.

[d] 4 375 piastres ..... 43.75 pounds. (using : < *or* = *or* >)

[e] 6 327 ≃ ..... (to the nearest 1 000)

❷ *Put the suitable relation (<) , (=) or (>) :* ..... / 5

[a] 25.25 ☐ 25 + 0.35

[b] 708.1 approximated to the nearest ten ☐ 7 081 approximated to the nearest hundred.

[c] 6 140 gm. ☐ 6.14 kg.

[d] 4 hundreds and 4 tenths ☐ 400.04

[e] 5.823 ☐ 58.23

---

❸ *Choose the correct answer :* ..... / 5

[a] $4\frac{7}{10}$ + 3.07 = ... (7.14 *or* 7.4 *or* 7.77 *or* 8.14)

[b] 236 ≃ ..... (to the nearest ten)

(230 *or* 240 *or* 250 *or* 260)

[c] 5 470 ÷ 100 = ... (54.7 *or* 5.47 *or* 547 *or* 5 470)

[d] $\frac{2}{5} + \frac{3}{7}$ = ... ($\frac{5}{15}$ *or* $\frac{29}{35}$ *or* $\frac{6}{35}$ *or* $\frac{5}{36}$)

[e] Five and seven tenths = ...

(5.7 *or* 7.5 *or* 0.75 *or* 75)

---

❹ *Find the result of each of the following :* ..... / 5

[a] 3 524.6 + 243.1 = ... ≃ .....

(to the nearest 1 000)

[b] 5 824.6 – 1 123.9 = ... ≃ ..... (to the nearest 100)

[c] 30 406 – 17 918 = ... ≃ ..... (to the nearest 1 000)

[d] 51.235 = ... ≃ ..... (to the nearest hundred)

[e] 5.26 + 7.02 = ... ≃ ..... (to the nearest 10)

---

❺ [a] What is the smallest whole number that if approximated to the nearest hundred gives a result of 600 ? ..... / 5

.....

[b] A cyclist is riding with speed of 7 300 m. per hour. Find the distance he covers in 3 hours approximating to the nearest 1 000

.....

Sheet 10 — From lesson (1) unit (1) to lesson (8C) unit (1)

Mark ..... / 25

1 Complete : ..... / 5

[a] 9 356 ≃ ..... (to the nearest 10 000)

[b] 507 614 ≃ ..... (to the nearest 100 000)

[c] 8 943.52 ≃ ..... (to the nearest 10 000)

[d] 61 950 000 ..... (to the nearest 100 000)

[e] 7 806 m. ≃ ..... km.

2 Choose the correct answer : ..... / 5

[a] 249 108 ≃ ..... (to the nearest 100 000)

(300 000 *or* 200 000 *or* 240 000)

[b] 258 643 ≃ ..... (to the nearest 10 000)

(250 000 *or* 260 000 *or* 259 000)

[c] 10 205 ≃ ..... (to the nearest 10 000)

(11 000 *or* 10 000 *or* 10 200)

[d] 768 154 ≃ 770 000 approximated to the nearest .....

(1 000 *or* 10 000 *or* 100 000)

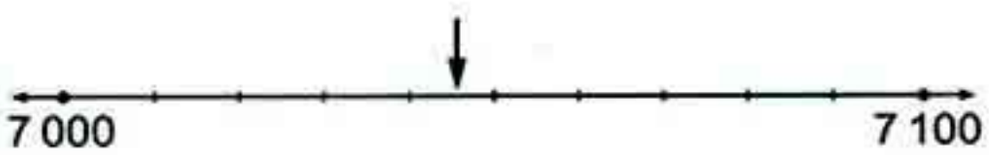
[e] 329 917 ≃ 300 000 approximated to the nearest .....

(1 000 *or* 10 000 *or* 100 000)

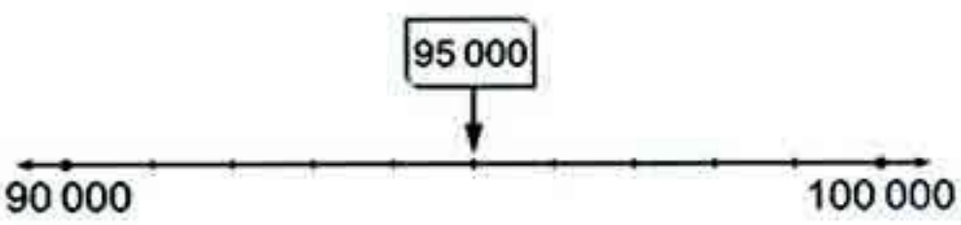
3 Notice the position of each of the following numbers on the number line , then complete : ..... / 5

[a] 

617 ≃ ..... (to the nearest 10)

[b] 

7 048 ≃ ..... (to the nearest 100)

[c] 

95 000 ≃ ..... (to the nearest 10 000)

4 ***Find the result of each , then approximate :*** ..... / 5

[a] 86 541 – 5 899 = ... ≃ .....
(to the nearest ten thousand)

[b] 19 935 + 870 506 = ... ≃ .....
(to the nearest hundred thousand)

[c] 12 234.289 – 108.804 = ... ≃ .....
(to the nearest ten thousand)

[d] 57 482.63 + 4 680.372 = ... ≃ .....
(to the nearest hundred thousand)

[e] (1 245.391 + 3 645.871) – 267.981 = ... ≃ .....
(to the nearest thousand)

---

5 ***Complete :*** ..... / 5

[a] $4\frac{3}{10}$ = ... (decimal number)

[b] $\frac{.....}{16} = \frac{3}{4}$

[c] $\frac{3}{8} - \frac{1}{8}$ = ...

[d] 5.7 = 5 + ...

[e] $8 - 3\frac{4}{5}$ = ...

Sheet 11 From lesson (1) unit (1) to lesson (8D) unit (1)

Mark ..... / 25

1 ***Complete :*** ..... / 5

[a] 74.45 ≃ ..... (to the nearest unit)

[b] 148.7 ≃ ..... (to the nearest whole number)

[c] The number 0.37 lying between ..... and .....

[d] 16.03 ..... (to the nearest unit)

[e] 275.645 ≃ ..... (to the nearest 100)

---

2 ***Choose the correct answer :*** ..... / 5

[a] 14.6 ≃ ..... (to the nearest unit)
(14 *or* 15 *or* 14.5)

[b] 97.75 m. ≃ ..... m. (to the nearest metre)
(100 *or* 97 *or* 98)

[c] 135 minutes ≃ ..... hours (to the nearest hour)
(1 *or* 2 *or* 3)

[d] 39 months ≃ ..... years (to the nearest year)

(2 **or** 3 **or** 4)

[e] 2.676 grams ≃ ..... kg. (to the nearest kg.)

(2 **or** 3 **or** 4)

3 ***Put (✓) for the correct statement and (×) for the incorrect one :*** ..... / 5

[a] 173 cm. ≃ 2 m. (to the nearest metre) ( )

[b] 32 kg. and 450 gm. ≃ 33 kg. (to the nearest kilogram) ( )

[c] $39\frac{3}{5} \simeq 39$ (to the nearest unit) ( )

[d] 0.643 ≃ 1 (to the nearest unit) ( )

[e] 49 ≃ 0 (to the nearest 10) ( )

4 ***Find the result of each :*** ..... / 5

[a] 5.243 + 8.677 = ... ≃ ..... (to the nearest 10)

[b] (25.27 + 73.2) – 35.02 = ... ≃ ..... (to the nearest unit)

[c] 634.5 – 95.43 = ... ≃ ..... (to the nearest hundred)

[d] 364 ÷ 100 = ... ≃ ..... (to the nearest unit)

5 ***Complete :*** ..... / 5

[a] 4.7 = 4 + ...

[b] Forty two and three tenths is written as .....

[c] 214 ÷ 1 000 = ...

[d] $\frac{1}{4} + \frac{3}{4}$ = ...

[e] 11.25 + 10.15 = ...

Sheet 12 — From lesson (1) unit (1) to lesson (8E) unit (1)

Mark ..... / 25

1 ***Complete :*** ..... / 5

[a] 2.39 ≃ ..... (to the nearest tenth)

[b] 43.07 ≃ ..... (to the nearest ten)

[c] 6.053 ≃ ..... (to the nearest $\frac{1}{10}$)

[d] 9 456 ≃ 10 000 (to the nearest .....)

[e] 865 ÷ 100 = ... ≃ ..... (to the nearest 0.1)

2 ***Put (✓) for the correct statement and (×) for the incorrect one :*** ..... / 5

[a] 45.256 ≃ 45 (to the nearest $\frac{1}{10}$) ( )

[b] 5 968 ≃ 6 000 (to the nearest 1 000) ( )

[c] 187.6 ≃ 280 (to the nearest 100) ( )

[d] 753 cm. ≃ 8 m. (to the nearest metre) ( )

[e] 82.05 ≃ 82.5 (to the nearest 0.1) ( )

---

3 ***Choose the correct answer :*** ..... / 5

[a] 100 days ≃ ..... weeks (to the nearest week)
(13 ***or*** 14 ***or*** 15)

[b] 371.456 ≃ ..... (to the nearest 100) (371.5 ***or*** 370 ***or*** 400)

[c] The number which if approximated to the nearest tenth and the result will be 0.8 is ..... (0.81 ***or*** 0.86 ***or*** 1)

[d] 38 000 is the approximation of 37 865 to the nearest .....
(100 ***or*** 10 000 ***or*** 1 000)

[e] 59.95 ≃ ..... (to the nearest $\frac{1}{10}$) (59.05 ***or*** 60 ***or*** 60.9)

---

4 ***Find the result of each , then approximate :*** ..... / 6

[a] 14.102 + 8.135 = ... ≃ ..... (to the nearest tenth)

[b] 534.460 – 79.864 = ... ≃ ..... (to the nearest one decimal)

[c] $3.5 - 1\frac{3}{4}$ = ... ≃ ..... (to the nearest $\frac{1}{10}$)

[d] 134.2 + 28.43 = ... ≃ ..... (to the nearest 100)

---

5 **[a]** ***Complete using the suitable digits :*** ..... / 4

(1) 28.0 ☐ ≃ 28.1 (to the nearest $\frac{1}{10}$)

(2) 60. ☐ 5 ≃ 60 (to the nearest unit)

[b] ***Write the smallest decimal number which consists of 6 , 5 , 1 and 7 , then approximate the result to the nearest tenth.***

The number is ..... ≃ .....

Sheet 13 — From lesson (1) unit (1) to lesson (1) unit (2)

Mark ..... / 25

1 Complete :

..... / 6

[a] Two polygons are congruent , if their corresponding sides are ..... and their corresponding angles are .....

[b] If the polygon ABCD is congruent to the polygon XYZL , then m (∠ Z) = m (∠ .....)

[c] If : Δ KLM ≡ Δ AUC , then $\overline{KL}$ ≡ .....

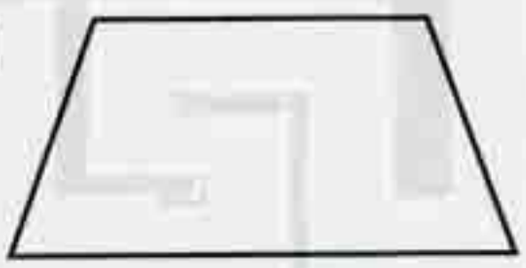
[d] Two squares are said to be congruent , if the side length of one of them equals ..... of the other.

[e] The rectangle ABCD ≡ the rectangle XYZL , then $\overline{BC}$ ≡ .....

2 If possible , draw a line in each figure , to get two congruent figures :

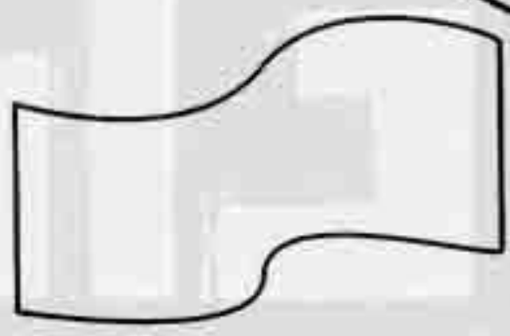
..... / 5

[a]



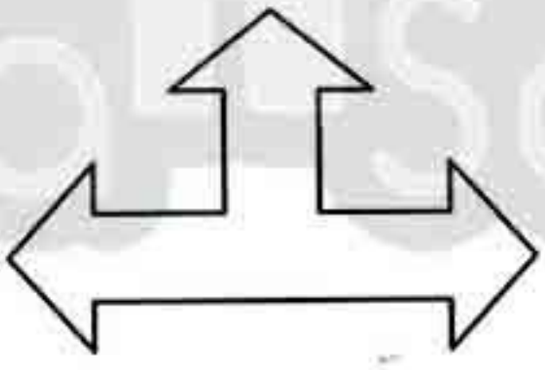
[b]

[c]



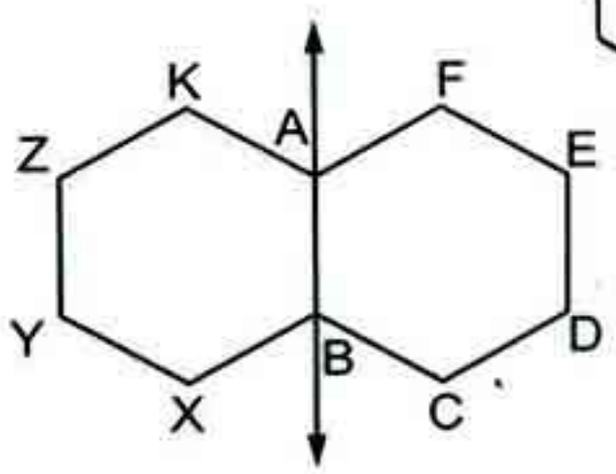
[d]

[e]



3 In the opposite figure , the polygon ABCDEF ≡ the polygon ABXYZK , complete :

..... / 4



[a] $\overline{CD}$ ≡ .....

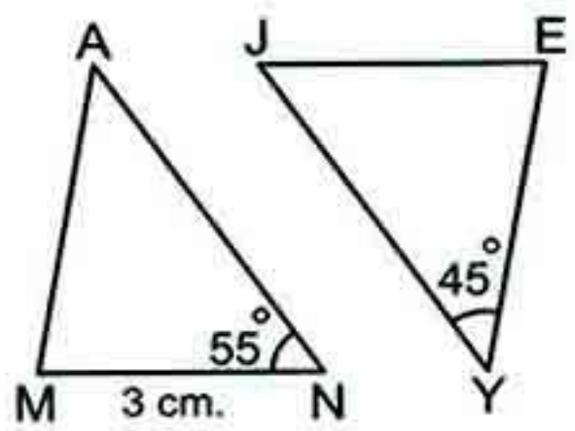
[b] ∠ X ≡ ∠ .....

[c] KA = ...

[d] m (∠ Y) = m (∠ .....)

4 ***In the opposite figure :***

If* Δ *AMN* ≡ Δ *YEJ* , *complete :



..... / 5

[a] $\overline{AM}$ ≡ ..... **[b]** ∠ E ≡ ∠ .....

[c] EJ = ... = ... cm.

[d] m (∠ Y) = m (∠ .....) = ...°

[e] m (∠ J) = ...°

---

5 ***Choose the correct answer :***

..... / 5

[a] $\frac{3}{10}$ + 0.8 = ... (0.38 ***or*** 3.8 ***or*** 0.11 ***or*** 1.1)

[b] The place value of the digit 4 in the number 8.4 is .....

(units ***or*** tens ***or*** tenth ***or*** hundred)

[c] One hundred , fifty eight and seven tenth , is written .....

(158.7 ***or*** 15.87 ***or*** 1.587 ***or*** 1 587)

[d] $457\frac{1}{5}$ ≃ ..... (to the nearest whole number)

(457 ***or*** 458 ***or*** 455 ***or*** 659)

[e] $5\frac{7}{100}$ = ... (5.07 ***or*** 5.7 ***or*** 5.007 ***or*** 7.05)

Sheet 14 — From lesson (1) unit (1) to lesson (2) unit (2)

Mark ..... / 25

1 ***Complete :***

..... / 5

[a] 1.007 + 9 = ... ≃ ..... (to the nearest $\frac{1}{10}$)

[b] 5.42 – 3.362 = ... ≃ ..... (to the nearest unit)

[c] The place value of the digit 7 in the number 72.34 is .....

[d] 37.42 + 43.001 + 69.5 = ... ≃ ..... (to the nearest 100)

[e] ☐ 78 590 ≃ 300 000 (to the nearest 100 000)

---

2 ***Choose the correct answer :***

..... / 5

[a] The rhombus has ..... lines of symmetry.

(2 ***or*** 3 ***or*** 4)

[b] The isosceles triangle has ..... lines of symmetry.

(1 ***or*** 2 ***or*** 3)

[c] The parallelogram has ..... lines of symmetry.

(0 ***or*** 1 ***or*** 2)

[d] The scalene triangle has ..... line(s) of symmetry.
(0 **or** 2 **or** 4)

[e] The trapezium has ..... lines of symmetry. (1 **or** 4 **or** 0)

3 ***Put (✓) for the correct statement and (×) for the incorrect one :*** ..... / 5

[a] The equilateral triangle has 3 lines of symmetry. ( )

[b] The equality of the corresponding sides of two polygons is not enough to be congruent. ( )

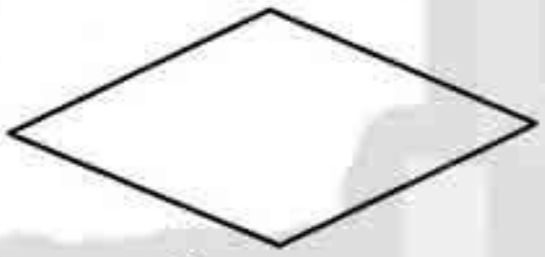
[c] The isosceles trapezium has zero line of symmetry. ( )

[d] The regular hexagon has 6 lines of symmetry. ( )

[e] The rectangle has 4 lines of symmetry. ( )

4 ***In each of the following , draw all lines of symmetry (if possible) :*** ..... / 5

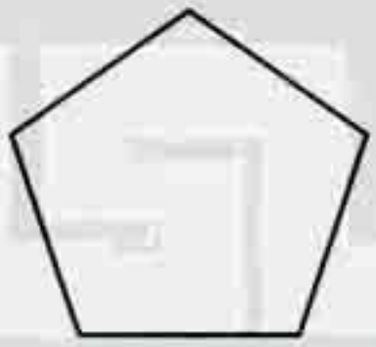
[a]



[b]

[c]

[d]



[e]

5 **[a]** ***Find the result :*** ..... / 5

(1) $95.7 - 62.31 \simeq$ ..... (to the nearest $\frac{1}{10}$)

(2) $24\,819 \div 1\,000 \simeq$ ..... (to the nearest unit)

[b] ***Arrange the following numbers ascendingly :*** 0.45 , 5.4 , 4.5 and 0.54

.....

Sheet 15 — From lesson (1) unit (1) to lesson (3) unit (2)

Mark ..... / 25

1 ***Complete :*** ..... / 5

[a] 7.2 = ... (in a mixed form)

[b] 10.321 = 10 + ... + ... + 0.02 + ...

[c] $\frac{1}{8}$ + 0.13 = ... $\simeq$ ..... (to the nearest unit)

[d] 1 + 0.973 = ... $\simeq$ ..... (to the nearest tenth)

[e] 2 854 m. $\simeq$ ..... km. (to the nearest km.)

2 ***Put (✓) or (×) :*** ..... / 5

[a] 0.49 < 0.5 ( )

[b] The parallelogram has four lines of symmetry. ( )

[c] 20 , 17 , 14 , 11 is pattern of decreasing by 3 ( )

[d] 6 hundredths + 16 tenths = 6.22 ( )

[e] 0.4 = 0.7 – 0.30 ( )

---

3 ***Choose the correct answer :*** ..... / 5

[a] In the rectangle ABCD , $\overline{AB}$ // ..... ($\overline{BC}$ *or* $\overline{DC}$ *or* $\overline{BD}$)

[b] The value of the digit 6 in the number 18.36 is .....

(6 *or* 60 *or* 0.06 *or* 600)

[c] BAC CAB BAC ..... (BAC *or* ABC *or* CAB)

[d] 1 , 3 , 9 , 27 , ... (36 *or* 81 *or* 30)

[e] The number of lines of symmetry of the square ☐ the number of lines of symmetry of the rhombus. (> *or* = *or* <)

---

4 ***Discover the rule and find the next one :*** ..... / 5

[a]  .....

[b]  .....

[c]  .....

[d] A , Z , B , Y , C , X , ... , ...

---

5 ***Choose the correct answer :*** ..... / 5

[a] $\frac{3}{4}$ = ... (0.75 *or* 0.8 *or* 0.0755 *or* 0.25)

[b] The number $\frac{18}{4}$ = ... ($4\frac{1}{2}$ *or* $4\frac{2}{3}$ *or* $4\frac{3}{5}$ *or* $4\frac{2}{5}$)

[c] The digit of tenths in the number 23.69 is .....

(9 *or* 6 *or* 3 *or* 2)

[d] 9 085 ≃ 9 000 to the nearest .....

(10 *or* 100 *or* 1 000 *or* 10 000)

[e] 11.25 + 10.15 = ... (21.25 *or* 22.15 *or* 21.40)

Sheet 16 — From lesson (1) unit (1) to lesson (1) unit (3)

Mark ..... / 25

1 ***Complete :*** (..... / 6)

[a] 4 000 mL = ... litres

[b] 6 litres = ... millilitres

[c] 2 $dm.^3$ = ... mL

[d] $7\frac{3}{4}$ litres = ... millilitres

[e] 3.04 + 2.201 = ... ≃ ..... (to the nearest unit)

---

2 ***Put the suitable relation (<) or (=) or (>) :*** (..... / 5)

[a] 1 litre ☐ 1 $dm.^3$

[b] 4 000 mL ☐ 40 litres

[c] $\frac{1}{4}$ litre ☐ 245 millilitres

[d] 5 $dm.^3$ ☐ 245 millilitres

[e] 1 750 mL ☐ $2\frac{3}{4}$ litres

---

3 ***Choose the correct answer :*** (..... / 5)

[a] The capacity of gasoline tank in a car is .....

(5 mL ***or*** 200 litres ***or*** 50 litres)

[b] The capacity of water in a waching machine is .....

(1 000 $cm.^3$ ***or*** 20 L ***or*** 200 mL)

[c] I drink about ..... of water daily. (2 L ***or*** 50 mL ***or*** $\frac{1}{2}$ L)

[d] The capacity of juice in a family size bottle is .....

(10 L ***or*** 100 mL ***or*** 2 $dm.^3$)

[e] The capacity of a bottle of medicine is .....

($\frac{1}{8}$ L ***or*** 1 $dm.^3$ ***or*** 1 $cm.^3$)

---

4 **[a]** ***Arrange the following quantities in an ascending order :*** (..... / 4)

250 mL , 1 L , $1\frac{1}{4}$ $dm.^3$ and $\frac{3}{4}$ L

The order is : .....

[b] ***Arrange the following quantities in a descending order :***

2 000 mL , 20 L , $2\frac{3}{4}$ $dm.^3$ and 3 000 $cm.^3$

The order is : .....

5 ***Choose the correct answer :*** ..... / 5

[a] The equilateral triangle has ..... lines of symmetry.

(2 *or* 1 *or* 3 *or* 4)

[b] $\frac{2}{5} + \frac{3}{7}$ = ... ($\frac{5}{12}$ *or* $\frac{24}{35}$ *or* $\frac{6}{35}$ *or* $\frac{6}{7}$)

[c] 49.57 ÷ 10 = ... (4.957 *or* 47.49 *or* 495.7 *or* 4975)

[d] 530 , 533 , 536 this pattern is increasing by .....

(3 *or* 4 *or* 5 *or* 543)

[e] The value of the digit 4 in the number 0.41 is .....

(0.04 *or* 0.4 *or* 40)

Sheet 17 — From lesson (1) unit (1) to lesson (2) unit (3)

Mark ..... / 25

1 ***Complete :*** ..... / 6

[a] $6\frac{1}{4}$ litres = ... mL **[b]** $3\frac{1}{2}$ kg. + 250 gm. = ... kg.

[c] $\frac{1}{4}$ ton = ... kg. **[d]** ..... kg. = $2\frac{1}{4}$ kg. + 750 gm.

[e] 2 403.5 – 79.08 = ...≃ .....(to the nearest 1 000)

2 ***Choose the suitable weight for :*** ..... / 5

[a] An elephant ..... (grams *or* kilograms *or* tons)

[b] A ring ..... (grams *or* kilograms *or* tons)

[c] A goat ..... (grams *or* kilograms *or* tons)

[d] A refrigerator .....

(150 grams *or* 150 kilograms *or* 150 tons)

[e] An iron ..... (3 gm. *or* 2 kg. *or* $\frac{1}{2}$ ton)

3 ***Put the suitable relation (<) or (=) or (>) :*** ..... / 5

[a] 8.4 ☐ 8.04 **[b]** $\frac{1}{4}$ litre + $\frac{3}{4}$ dm.^{3} ☐ 1 000 mL

[c] $5\frac{3}{4}$ kg. ☐ 5 tons **[d]** 6 250 gm. + $\frac{3}{4}$ kg. ☐ 7 tons

[e] 43 102 gm. ☐ 1 ton

4 **[a]** ***Arrange the following quantities in a descending order :*** ..... / 4

$\frac{1}{2}$ ton , 800 000 gm. , 7 000 kg. and 789 kg.

The order is : .....

[b] ***Arrange the following quantities in an ascending order :***

49 570 gm. , 47 kg. , 7 tons and 4 750 gm.

The order is : .....

5 ***Complete :*** ..... / 5

[a] $\frac{9}{5}$ = ... (in a decimal form)

[b] 4 + 5.36 + 6.12 ≃ ..... (to the nearest $\frac{1}{10}$)

[c] 204.9 – 23.85 ≃ ..... (to the nearest unit)

[d] 6 ☐ 74 ≃ ☐ 300 (to the nearest 100)

[e] $\frac{45}{55} = \frac{.....}{.....}$

Sheet 18 From lesson (1) unit (1) to lesson (3) unit (3)

Mark ..... / 25

1 ***Complete :*** ..... / 6

[a] 7 tons = ... grams

[b] 6 000 mL = ... litres

[c] $3.75 + 1\frac{1}{4}$ = ... ≃ ..... (to the nearest 10)

[d] 2 hours and 30 minutes = ... minutes.

[e] $1\frac{1}{2}$ days = ... hours

2 ***Put the suitable relation (<) , (=) or (>) :*** ..... / 5

[a] 750 gm. ☐ $\frac{1}{2}$ kg.

[b] $\frac{3}{4}$ hour ☐ 40 minutes

[c] $1\frac{1}{4}$ days ☐ 1 800 minutes

[d] 84 hours ☐ 4 days

[e] 45 days ☐ 7 weeks

3 ***Choose the suitable time for :*** ..... / 5

[a] Reading a short story .....

(30 seconds ***or*** 30 minutes ***or*** 30 hours)

[b] Burshing your teeth .....

(3 seconds ***or*** 3 minutes ***or*** 30 minutes)

[c] A person sleeps daily about .....

(8 seconds ***or*** 8 minutes ***or*** 8 hours)

[d] Drinking a cup of coffee .....

(5 seconds *or* 5 minutes *or* 1 hour)

[e] Watching a football match .....

(90 minutes *or* 180 minutes *or* 4 hours)

---

4 [a] ***Arrange each of the following in an ascending order :*** ..... / 4

1 week , $\frac{2}{3}$ a day , 3 600 seconds and 24 minutes

The order is : .....

[b] ***Arrange each of the following in a descending order :***

$\frac{1}{3}$ day , 3 600 seconds , 44 minutes and 1 week

The order is : .....

---

5 The TV series started at 7:30 PM and took 45 minutes. ..... / 5

What time did it finish ?

.....

Sheet 19 From lesson (1) unit (1) to lesson (1) unit (4)

Mark ..... / 25

1 ***Complete :*** ..... / 7

[a] milliltre = ... litre

[b] 20.30 – 2.03 ≃ ..... (to the nearest $\frac{1}{10}$)

[c] $2\frac{1}{4}$ days = ... hours

[d] 10 , 9.6 , 9.2 , ... (in the same pattern)

[e] Data are collected by using : ..... , ... and .....

---

2 ***Choose the suitable answer :*** ..... / 5

[a] The square has ..... lines of symmetry. (zero *or* 2 *or* 4)

[b] 2.5 < ..... < 3 (2.1 *or* 2.8 *or* 3.01)

[c] 6 020 gm. = 6 kg. + ... gm. (20 *or* 2 000 *or* 200)

[d] $8\frac{4}{5}$ = ... (8.4 *or* 8.8 *or* 8.5 *or* 5.4)

[e] 3 254.6 – 1 357.94 ≃ .....(to the nearest 10)

(1 896.7 *or* 1 897 *or* 1 900)

Exercise 5

Operations on decimal numbers

Solve Ex.

1. Find the result:

a) 0.175 + 0.623 = ...

b) 2.573 + 7.320 = ...

c) 9.798 − 4.543 = ...

d) 74.28 + 25.72 = ...

e) 52.273 − 41.514 = ...

f) 985.287 + 213.243 = ...

g) 372.532 − 130.758 = ...

h) 289.007 + 14.43 = ...

i) 666.66 − 549.958 = ...

j) 3218.975 + 218.853 = ...

k) 379.008 + 23.75 = ...

l) 798.007 − 193.872 = ...

2. Find the result:

a) 17.3 + 4.6 = ...

b) 13.8 + 5.75 = ...

c) 0.875 + 0.43 = ...

d) 13 + 2.65 = ...

e) 5.7 - 1.4 = ...

f) 89.75 - 5.34 = ...

g) 13 - 2.65 = ...

h) 0.6 - 0.275 = ...

i) 312.5 - 157.125 = ...

j) 68.005 - 24.25 = ...

k) $2\frac{1}{8}$ + 6.5 = ...

l) 27.1 - $13\frac{3}{5}$ = ...

3. Find the result:

a) 67 ÷ 10 = ...
b) 892 ÷ 10 = ...
c) 408 ÷ 10 = ...
d) 178 ÷ 100 = ...
e) 345 ÷ 1000 = ...
f) 987 ÷ 100 = ...
g) 67 ÷ 100 = ...
h) 900 ÷ 1000 = ...
i) 978 ÷ 1000 = ...
j) 1895 ÷ 1000 = ...
k) 7 ÷ 10 = ...
l) 7 ÷ 100 = ...
m) 7 ÷ 1000 = ...
n) 782 ÷ 10 = ...
o) 250 ÷ 10 = ...
p) 2857 ÷ 100 = ...
q) 7280 ÷ 100 = ...
r) 99875 ÷ 1000 = ...
s) 8376 ÷ 1000 = ...

4. Choose the correct answer:

a) 8574 ÷ 100 = ... (857.4 , 85.74 , 8.574 **or** 857400)
b) 14 – 1.4 = ... (1.2 , 12.6 , 0.126 **or** 1.26)
c) 247 ÷ 100 = ... (0.0247 , 2.47 , 24.7 **or** 0.247)
d) 54.238 + 5.8 = ... (54.296 , 59.246 , 60.038 **or** 60.38)
e) 42819 ÷ 1000 = ... (42.829 , 42.819 , 42.89 **or** 0.428)
f) 4570 gm = ... kg. (4.5 , 4.57 , 45.7 **or** 0.457)
g) 325 piasters = ... pounds. (325 , 5.32 , 3.25 **or** 32.5)
h) 4.7 + 3.07 = ... (714 , 8.4 **or** 7.77)
i) 9870 ÷ 100 = ... (98.7 , 9.87 **or** 987)
j) 137.234 – 37.04 = ... (133.530 , 100.194 **or** 100.23)
k) 540 piasters = ... pounds. (5.4 , 54 **or** 0.54)
l) 256.104 = 256 + 0.1 + ... (0.04 , 0.4 **or** 0.004)

5. Put the suitable sign (< , = or >):

a) 7.9 + 2.3 ..... 11.7 – 1.3

b) 58.003 – 57.03 ..... 1 + 0.973

c) 99.89 – 90.09 ..... 10 – 1.01

d) 520.46 + 0.37 ..... 520 + 1.19

e) 4.722 ..... 8 – 3.22

f) 6.18 + 3.82 ..... 87.56 - 77.5

g) 175 ÷ 100 ..... 175 ÷ 100

h) 1.75 ..... $1\frac{3}{4}$

i) 785 ÷ 10 ..... 8000 ÷ 100

6. Find the result:

a) 73.24 + 32.02 + 12.17 = ...

b) 28.65 + 17.3 + 2.05 = ...

c) 52.17 + 47.005 + 37.3 = ...

d) 7 + 5.12 + 8.592 = ...

e) 53.245 + 1.97 + 213.8 = ...

f) 12.7 + 10.007 + 3.07 = ...

g) $9.28 + 8.48 - 3\frac{27}{100}$ = ...

h) 512 + 88.35 - 67.035 = ...

i) (24.235 + 0.065) - (17 + 1.3) = ...

j) (23456 ÷ 10) + (23456 ÷ 100) = ...

7. Complete each of the following:

a) ..... + 27.35 = 75.87

b) 43.65 + ... = 108.89

c) 67.97 + ... = 128.75

d) ..... + 47.85 = 100

e) 97.35 – ..... = 63.89

f) 33.3 – ..... = 12.008

g) ..... – 41.41 = 3.8

h) ..... – 12.37 = 17.83

8. Write the missing digits:

a)
$$\begin{array}{r} 97.48 \\ +\ 43.\square\square \\ \hline \square\square\square.93 \end{array}$$

b)
$$\begin{array}{r} 83.570 \\ -\ \square\square.734 \\ \hline 24.\square\square\square \end{array}$$

c)
$$\begin{array}{r} 183.75 \\ +\ \square 98.\square\square \\ \hline 3\square\square.88 \end{array}$$

d)
$$\begin{array}{r} 981.323 \\ -\ 172.\square\square 7 \\ \hline 8\square\square.96\square \end{array}$$

e)
$$\begin{array}{r} 113.57\square \\ -\ \ 13.\square\square 8 \\ \hline \square\square\square.17\square \end{array}$$

f)
$$\begin{array}{r} 299.\square\square\square \\ -\ \ \square\square.457 \\ \hline 243.\square 3\square \end{array}$$

9. Choose the correct answer in each of the following:

a) (36.75 + 752.25) ÷ 100 = ...

- 8.79
- 0.789
- 7.89
- 789

b) (8795.379 – 4321.379) ÷ 1000 = ...

- 4574
- 4.474
- 4.474
- 8795

Life Problems

10. Hossam has P.T. 425 and his sister Hend has P.T. 980. **Find the difference between what they have in L.E.**

11. Nahla bought a washing machine for L.E. 3950.75 and a TV set for L.E. 3200.25. If she had L.E. 8 000, **how much money left with her?**

12. Mazen has 35 pounds. He bought a ball for L.E. 9.75 and a book for P.T. 840. **How much money was left with him?**

P.T. 840

L.E. 9.75

13. Hanaa has 200 pounds. She wants to buy a pair of shoes for L.E. 99.8, a bag for L.E. 45.75 and a dress for L.E. 70.25. Can she buy all what she wants? **Why?**

L.E. 70.25

L.E. 45.75

L.E. 99.8

14. A man bought three meters of cloth to make two shirts, one for him and another for his son. If you know that one meter and three quarters of a meter of cloth are needed for the man's shirt and one meter and half a meter for the son's shirt, **answer the following questions:**

a) **Is what the man bought enough to make the two shirts or will he need another piece of cloth?**

b) **If he needs another piece of cloth, how much cloth will he need to buy?**

enough to تكفى لـ

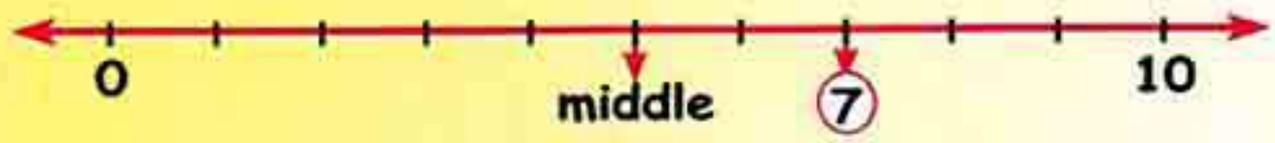
Solve Ex.

Exercise 6

Approximating to the nearest ten, hundred and thousand

1. Represent each of the following on the number line, then complete as the

Example:



$7 \simeq 10$ (to the nearest 10)

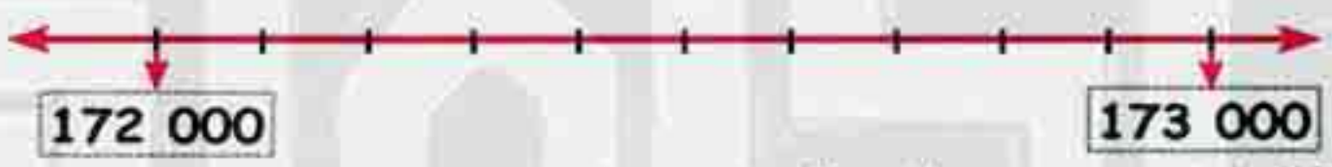
a)

$53 \simeq$ ..... (to the nearest 10)

b)

$38 \simeq$ ..... (to the nearest 100)

c)



$172\,400 \simeq$ ..... (to the nearest 1 000)

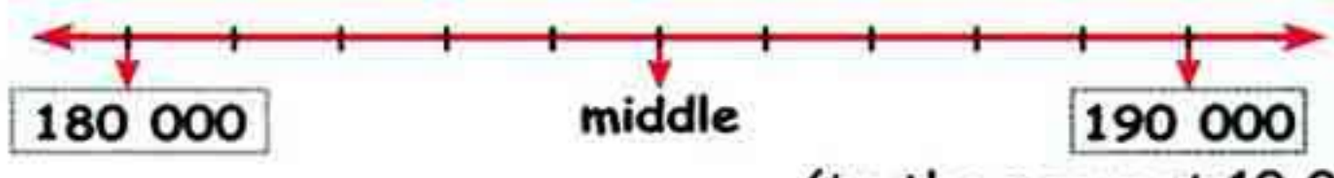
d)

$2\,183 \simeq$ ..... (to the nearest 10)

e)

$5\,370 \simeq$ ..... (to the nearest 100)

f)



$183\,000 \simeq$ ..... (to the nearest 10 000)

g)

$295\,345 \simeq$ ..... (to the nearest 100 000)

2. Approximate each of the following to the nearest ten as the example:

Example: 123 ≃ 120

a) 514 ≃ ..... b) 237 ≃ ..... c) 1 199 ≃ .....

d) 13 297 ≃ ..... e) 68 019 ≃ ..... f) 1 753 ≃ .....

g) 8 004 ≃ ..... h) 513.6 ≃ ..... i) 9 999 ≃ .....

j) 9 004 ≃ ..... k) 21 395 ≃ ..... l) $38\frac{3}{5}$ ≃ .....

m) $416\frac{3}{8}$ ≃ .....

---

3. Approximate each of the following to the nearest hundred as the example:

Example: 290 ≃ 300

a) 268 ≃ ..... b) 17 897 ≃ ..... c) 31 987 ≃ .....

d) 73 051 ≃ ..... e) 27 993 ≃ ..... f) 72 357 ≃ .....

g) 89 950 ≃ ..... h) 372 051 ≃ ..... i) 603 499 ≃ .....

j) 973 049 ≃ ..... k) 990 909 ≃ ..... l) 1 990 909 ≃ .....

m) 564.8 ≃ ..... n) $412\frac{3}{10}$ ≃ ..... o) $799\frac{6}{7}$ ≃ .....

---

4. Approximate each of the following to the nearest thousand:

Example: 290 ≃ 300

a) 216 296 ≃ ..... b) 7 435.5 ≃ ..... c) 5 321.77 ≃ .....

d) 519 901 ≃ ..... e) 57 059.8 ≃ ..... f) 999 500 ≃ .....

g) $3\,568\frac{5}{8}$ ≃ ..... h) 63 428.99 ≃ ..... i) $99\,728\frac{3}{4}$ ≃ .....

j) 519 900 ≃ ..... k) 999 500 ≃ ..... l) 6 435.5 ≃ .....

m) 75 049.9 ≃ .....

5. 🕮 Approximate each of the following numbers according to the required approximation:

a) 65 232.1 ≃ ..... (to the nearest ten thousand)

b) 13 950.5 ≃ ..... (to the nearest ten thousand)

c) 87 654 321 ≃ ..... (to the nearest hundred thousand)

d) 650 049.76 ≃ ..... (to the nearest hundred thousand)

e) 153 876 ≃ ..... (to the nearest 10 000)

f) 65 432.1 ≃ ..... (to the nearest 10 000)

g) 10 500 ≃ ..... (to the nearest 10 000)

h) 8 943.52 ≃ ..... (to the nearest 10 000)

i) 236 849.99 ≃ ..... (to the nearest 10 000)

j) 650 049.76 ≃ ..... (to the nearest 10 000)

k) 1 234 578.9 ≃ ..... (to the nearest 10 000)

l) 4 995 007 ≃ ..... (to the nearest 10 000)

m) 61 950 000 ≃ ..... (to the nearest 10 000)

n) 87 654 321 ≃ ..... (to the nearest 10 000)

o) 999 999 ≃ ..... (to the nearest 10 000)

---

6. Find the result of each of the following, then approximate the result according to the given:

a) 36 708.3 + 17 905 = ... ≃ ..... (to the nearest hundred)

b) 893.44 + 987.56 = ... ≃ ..... (to the nearest thousand)

c) 17 587.5 – 12 007.2 = ... ≃ ..... (to the nearest hundred)

d) 90 000 – 7 891 = ... ≃ ..... (to the nearest thousand)

e) 897.2 – 312.1 = ... ≃ ..... (to the nearest ten)

7. Find the result of each of the following operations, then approximate the result to the required approximation:

a) 700 000 – 65 093 = ... ≃ ..... (to the nearest ten)

b) 36 523 + 36 582 = ... ≃ ..... (to the nearest ten)

c) 60 000 - 48.5 = ... ≃ ..... (to the nearest hundred)

d) 29 301.5 + 5 436.4 = ... ≃ ..... (to the nearest ten thousand)

e) 149 200.8 + 19 537.9 = ... ≃ ..... (to the nearest hundred thousand)

f) 610 503.1 – 807.08 = ... ≃ ..... (to the nearest ten thousand)

g) 4 225 ÷ 10 = ... ≃ ..... (to the nearest ten)

h) 664 ÷ 100 = ... ≃ ..... (to the nearest ten)

i) 93 608.2 + 18 905 = ... ≃ ..... (to the nearest ten)

j) 893.44 + 987.56 = ... ≃ ..... (to the nearest hundred)

8. Complete the following table with suitable numbers:

	Nearest 10	Nearest 100	Nearest 1000	Nearest 10000	Nearest 100000
Example:	15 873	15 870	15 900	16 000	0
218 765	.....	.....	.....	.....	.....
54 123 $\frac{1}{2}$	.....	.....	.....	.....	.....
199 199.5	.....		.....	.....	.....
75 232.75	.....	.....	.....	.....	.....
6 543 217	.....	.....	.....	.....	.....
380 451.8	.....	.....	.....	.....	.....
12 395.98	.....	.....	.....	.....	.....
.....	.....	.....	694 500	.....	.....
.....	.....	.....	409 900	.....	.....
.....	.....	.....	.....	.....	.....
.....	.....	.....	654 000	.....	.....
284 139	.....	.....	.....	.....	.....

9. Find:

a) The greatest number that if approximated to the nearest ten, the result will be 650.

b) The greatest number that if approximated to the nearest hundred, the result will be 2 700.

c) The greatest number that if approximated to the nearest thousand, the result will be 47 000.

d) The smallest number that if approximated to the nearest thousand, the result will be 89 000.

e) The smallest number that if approximated to the nearest hundred, the result will be 6 800.

f) The smallest number that if approximated to the nearest ten, the result will be 1 980.

g) 🕮 The greatest number that if approximated to the nearest ten thousand, the result will be 20 000.

h) The greatest number that if approximated to the nearest hundred thousand, the result will be 9 700 000.

i) 🕮 What is the greatest whole number formed from different digits, which if approximated to the neatest hundred thousand, the result will be 98 500 000?

j) 🕮 What is the smallest whole number formed from different digits that if approximated to the nearest ten thousand, the result will be 21 060 000?

---

10. Find:

a) The greatest whole number formed from different digits that if approximated to the nearest hundred, the result will be 72 300.

b) The smallest whole number formed from different digits that if approximated to the nearest thousand, the result will be 237 000.

c) Two whole numbers that if each of them is approximated to the nearest hundred, the result will be 600 and the difference between them will be 99.

11. **Choose the correct answer:**

a) 8 547.3 ≃ 9 000 (to the nearest .....) (10 , 100 , 1 000 **or** 10 000)

b) 19 407.17 ≃ 20 000 (to the nearest .....) (10 , 100 , 1 000 **or** 10 000)

c) 32 567 ≃ 32 600 (to the nearest .....) (10 , 100 , 1 000 **or** 10 000)

d) 6 000 is the approximation of the number ..... (to the nearest thousand)

(5 678 , 5 497 , 5 398 **or** 4 999)

e) 40000 is the approximation of the number ..... (to the nearest ten thousand)

(45 000 , 33 245 , 34 989 **or** 38 783)

---

12. **Complete each of the following with the suitable digits:**

a) 3 5 ☐ 7 ≃ 3 ☐ 2 ☐ (to the nearest ten)

b) 9 ☐ 7 ☐ ≃ ☐ 8 7 ☐ (to the nearest ten)

c) 6 0 ☐ 9 ☐ . 5 4 ≃ ☐ ☐ 1 ☐ ☐ (to the nearest hundred)

d) 2 ☐ ☐ 7 5 . 8 ≃ ☐ 3 ☐ ☐ (to the nearest thousand)

e) 7 6 ☐ 4 3 5 ≃ 77 ☐ ☐ ☐ ☐ (to the nearest ten thousand)

Exercise 7

Solve Ex.

Approximating to the nearest unit and tenth

1. Represent the following on the number line, then complete:

a) 25.4

25.4 ≃ ..... (to the nearest unit)

b) 13.48

13.48 ≃ ..... (to the nearest tenth)

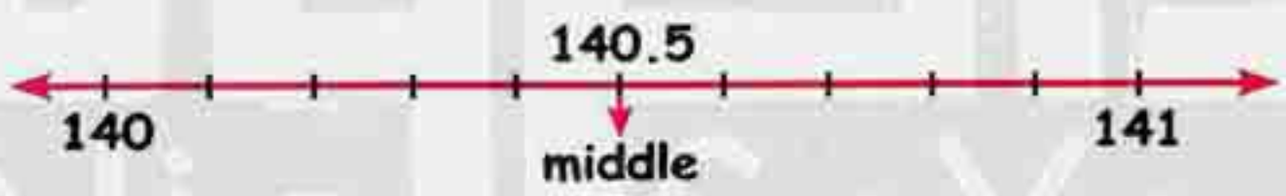
c) 67.15

67.15 ≃ ..... (to the nearest tenth)

d) 📖 28.3

28.3 ≃ ..... (to the nearest unit)

e) 📖 140.5

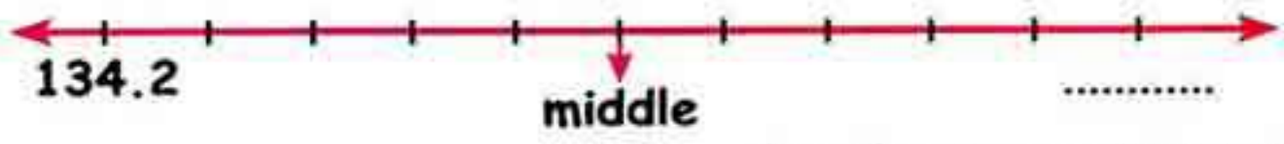


140.5 ≃ ..... (to the nearest unit)

f) 📖 51.85

51.85 ≃ ..... (to the nearest tenth)

g) 📖 134.29



134.29 ≃ ..... (to the nearest tenths)

h) 📖 70.07

70.07 ≃ ..... (to the nearest 1-decimal place)

2. Approximate the following to the nearest unit as the example:

Example: 324.17 ≃ 324

a) 112.37 ≃ .....

b) 19.98 ≃ .....

c) 271.9 ≃ .....

d) $127\frac{5}{8}$ ≃ .....

e) $715\frac{3}{8}$ ≃ .....

f) 📖 296.04 ≃ .....

g) 📖 13.75 ≃ .....

h) 📖 90.092 ≃ .....

i) 📖 170.597 ≃ .....

j) 📖 43.95 ≃ .....

k) 📖 $449\frac{3}{4}$ ≃ .....

l) 📖 $502\frac{37}{100}$ ≃ .....

m) 📖 $6399\frac{7}{50}$ ≃ .....

---

3. Approximate the following to the nearest tenth as the example:

Example: 75.08 ≃ 75.1

a) 18.338 ≃ .....

b) 15.975 ≃ .....

c) 13.085 ≃ .....

d) $12\frac{1}{4}$ ≃ .....

e) $10\frac{7}{20}$ ≃ .....

f) 📖 53.5 ≃ .....

g) 📖 10.1 ≃ .....

h) 📖 624.09 ≃ .....

i) 📖 600.601 ≃ .....

j) 📖 $\frac{7}{10}$ ≃ .....

k) 📖 $\frac{3}{5}$ ≃ .....

l) 📖 $967\frac{3}{4}$ ≃ .....

---

4. 📖 Approximate the following to the nearest whole number:

a) 10.1 **b)** 53.5 **c)** 624.09

d) 7.499 **e)** $967\frac{1}{4}$ **f)** $204\frac{3}{4}$

---

5. 📖 Approximate the following to the nearest one decimal place:

a) 13.57 **b)** 269.04 **c)** 83.914

d) 90.092 **e)** $502\frac{37}{100}$ **f)** $449\frac{3}{4}$

6. 🕮 **The following table shows the time in minutes spent by a pupil in doing his daily activities, answer the following questions:**

Activity	Studying	Playing	Watching TV
Time in minutes	125	45	30

a) What is the time consumed by the pupil in studying approximated to the nearest hour?

b) What is the total time consumed by the pupil in doing the three activities approximated to the nearest hour?

7. **Complete the table with suitable numbers as the example:**

		The number approximated to the nearest			
	Number	Tenth	Unit	Ten	Hundred
Example:	7346.83	7346.8	7347	7350	7300
	30780.55	.....	.....	.....	.....
	28059.019	.....	.....	.....	.....
	.....	45832.6	.....	.....	.....
	.....	.....	50381	.....	.....
	.....	.....	.....	29870	.....
	.....	.....	.....	.....	73200
	.....	.....	.....	.....	.....

8. **If the distance between two cities is 7825 metres, approximate this distance to the nearest kilometer.**

9. **Complete:**

a) 532.45 dm ≃ ..... m.

b) 12 456 dm ≃ ..... km.

c) 65 475 m ≃ ..... km.

d) 47 983 m ≃ ..... km.

e) LE. 78.9 ≃ L.E. ..... .

f) P.T. 456 ≃ L.E. ..... .

g) 5 hours and 15 minutes ≃ ..... hours.

h) 3 hours and 35 minutes ≃ ..... hours.

10. Find the result, then approximate it to the required approximation:

a) 14.352 + 25.687 = ... ≃ ..... (to the nearest tenth)

b) 253.607 - 114.98 = ... ≃ ..... (to the nearest unit)

c) 453.64 - 72.317 = ... ≃ ..... (to the nearest tenth)

d) 45.6 + 83.7 = ... ≃ ..... (to the nearest unit)

e) 📖 75 + 64.5 = ... ≃ ..... (to the nearest unit)

f) 📖 53.64 + 8.601 = ... ≃ ..... (to the nearest unit)

g) 📖 104.9 - 23.58 = ... ≃ ..... (to the nearest unit)

h) 📖 864.3 + 75.2 = ... ≃ ..... (to the nearest ten)

i) 📖 453.64 - 72.317 = ... ≃ ..... (to the nearest one decimal place)

---

11. Find the result, then approximate it to the required approximation:

a) 2 478 + 9 835 = ... ≃ ..... (to the nearest 100)

b) 7 000 000 - 134 609 = ... ≃ ..... (to the nearest 1 000)

c) 59.568 + 45.730 = ... ≃ ..... (to the nearest unit)

d) 86.70 - 3.45 = ... ≃ ..... (to the nearest $\frac{1}{10}$)

e) $\frac{1}{2}$ + 3 = ... ≃ ..... (to the nearest whole number)

f) 9 685 ÷ 100 = ... ≃ ..... (to the nearest tenth)

---

12. 📖 Carrying out the approximation operations, discover directly the mistake in each of the following approximated results giving the reason:

a) 6 273.5 ≃ 6 270 (to the nearest hundred)

(Wrong because .....)

b) 2 000.08 ≃ 20 000 (to the nearest whole number)

(Wrong because .....)

c) 2 222 + 3 333 ≃ 5 550 (to the nearest ten)

(Wrong because .....)

d) 999.9 - 555.5 ≃ 440 (to the nearest hundred)

(Wrong because .....)

13. 🕮 **Write each of the required numbers using all the digits 2 , 3 , 5 , 8 and decimal point to satisfy the following equalities as the example:**

Example: 82.35 ≃ 82 to the nearest unit.

a) ..... ≃ 20 to the nearest ten.

b) ..... ≃ 83.3 to the nearest tenth.

c) ..... ≃ 8000 to the nearest thousand.

d) ..... ≃ 9000 to the nearest thousand.

e) ..... ≃ 28.4 to the nearest $(\frac{1}{10})$.

f) ..... ≃ 240 to the nearest (10).

---

14. **Choose the correct answer in each of the following:**

a) 654.3 is the approximation of the number ..... (to the nearest tenth)

- 654.29
- 654.36
- 654.35

b) 37.6 is the approximation of the number 37.63 to the nearest .....

- unit
- tenth
- ten

c) 570 is the approximation of the number ..... (to the nearest unit)

- 571.7
- 570.2
- 571.8

d) 20 is the approximation to the nearest unit of all the following numbers except .....

- 19.98
- 20.1
- 31.3

Solve Ex.

Exercise 1

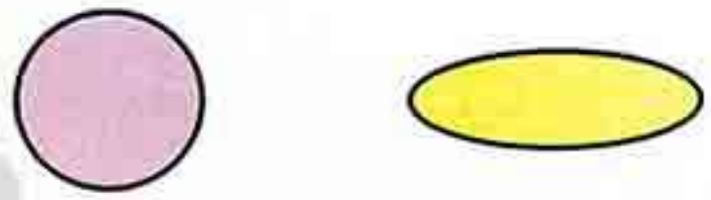
Congruency

1. Are the figures congruent? Write the answer as the example (to become sure you can use a sheet of tracing paper):

Example:

yes , congruent

a)

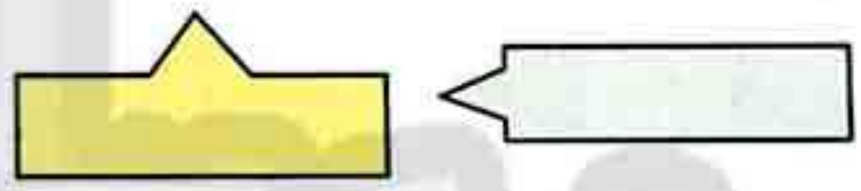


.....

b)

.....

c)

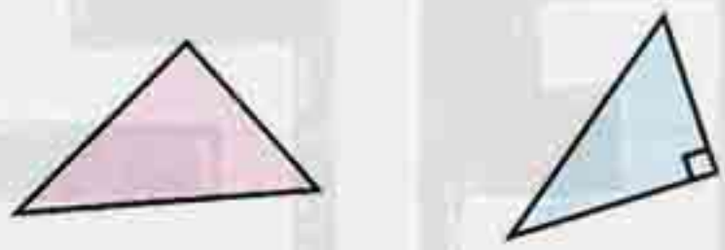


.....

d)

.....

e)



.....

2. Join each figure in group (a) to its congruent figure from group (b) as the example:

Example:

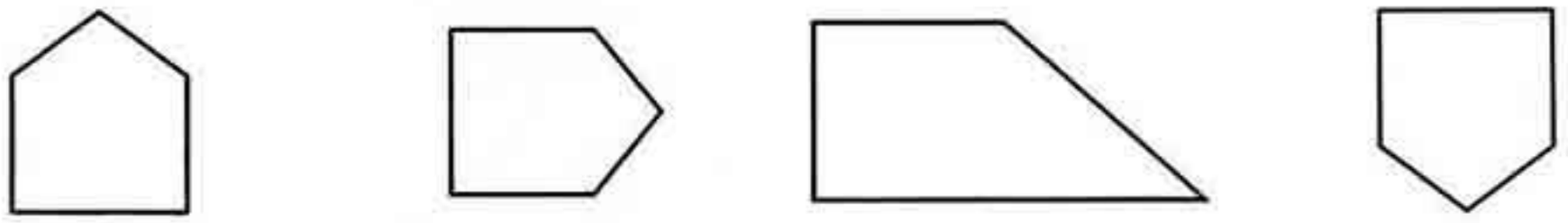
a)

b)

3. Choose the two congruent shapes in each of the following cases as the example:

Example:

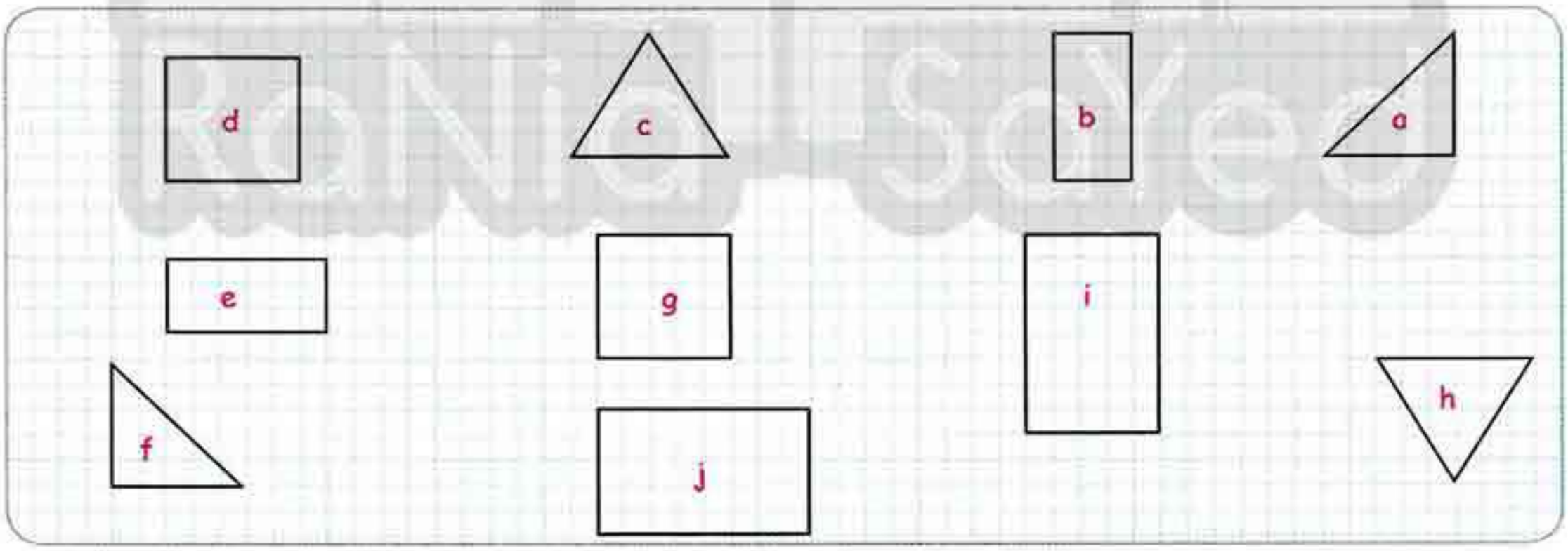
a)



b)

c)

4. Complete using the following figures:



a) The figure (a) ≡ the figure (.....)

b) The figure (b) ≡ the figure (.....)

c) The figure (c) ≡ the figure (.....)

d) The figure (d) ≡ the figure (.....)

e) The figure (i) ≡ the figure (.....)

5. In the opposite figures: If $\Delta ABC \equiv \Delta KLM$,

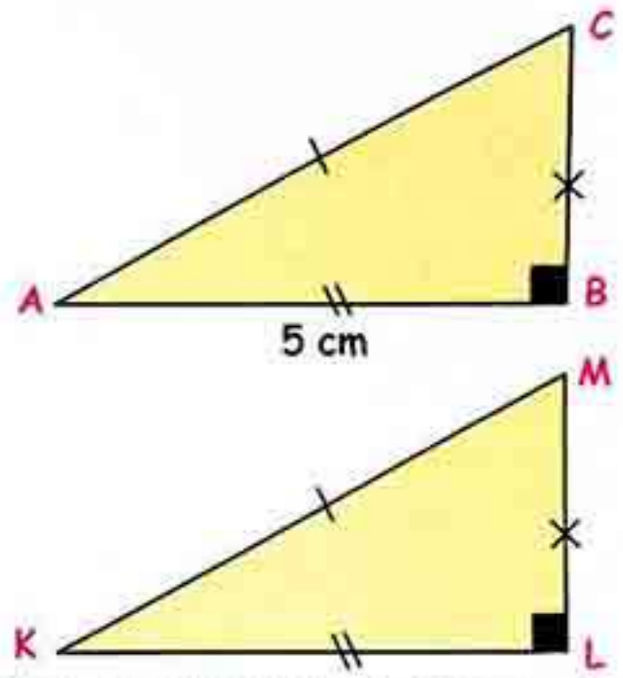
complete:

a) $\overline{AC} \equiv$ .....

b) $\overline{LM} \equiv$ .....

c) $\angle B \equiv \angle$ .....

d) KL = ... = ... cm



6. In the opposite figures: If $\Delta ABC \equiv \Delta XYZ$,

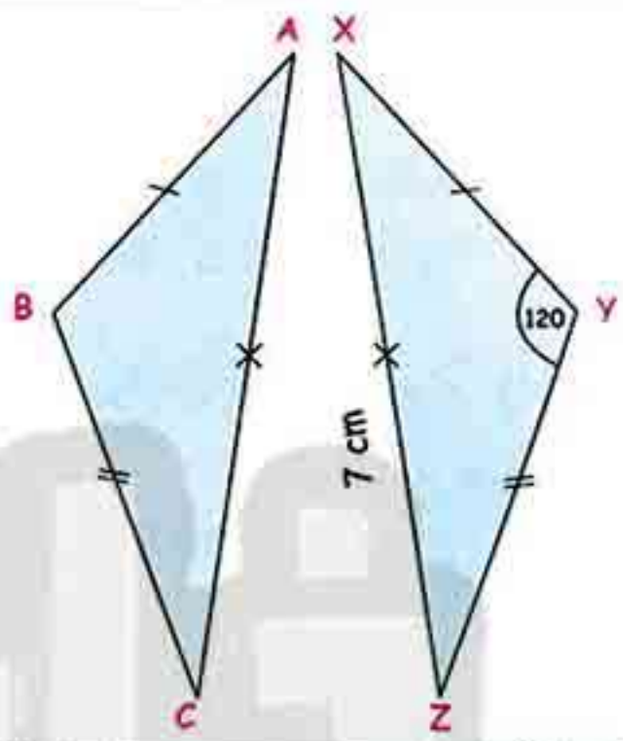
complete:

a) AC = ... = ... cm

b) $\overline{BC} \equiv$ .....

c) $\angle C \equiv \angle$ .....

d) m ($\angle B$) = m ($\angle$ .....) = ...°



7. In the opposite figures: If $\Delta ABC \equiv \Delta XYZ$,

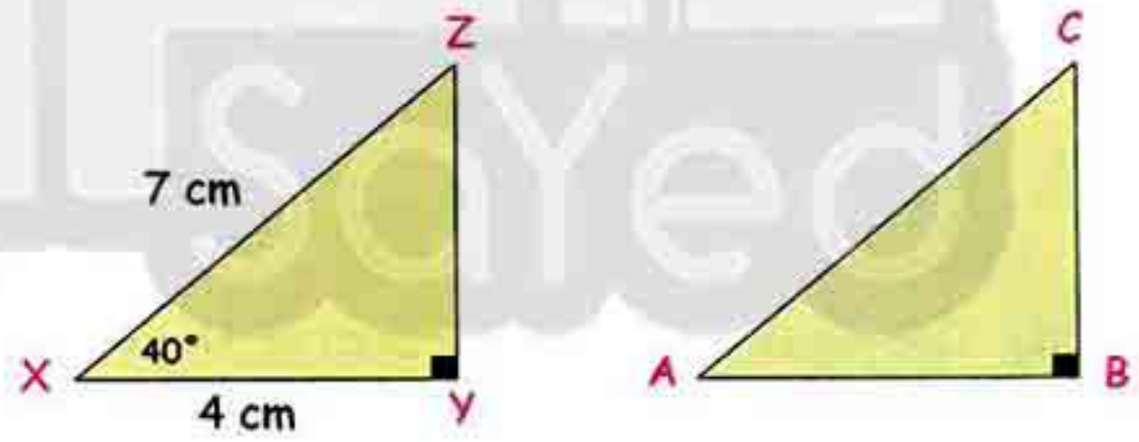
complete:

a) m ($\angle A$) = ...°

b) m ($\angle Z$) = ...°

c) AC = ... cm

d) AB = ... cm



8. Choose the correct answer in each of the following:

a) If figure ABCD ≡ figure XYZL, then $\angle A \equiv$ .....
- $\angle B$
- $\angle C$
- $\angle X$
- $\angle Z$

b) If $\triangle XYZ \equiv \triangle LMN$, then $\overline{LM} \equiv$ .....
- $\overline{XY}$
- $\overline{YZ}$
- $\overline{ZX}$
- $\overline{MN}$

9. Complete:

a) Two polygons are congruent if their corresponding sides are ..... and their corresponding angles are .....

b) The diagonal of the rectangle divides it into two ..... triangles.

c) Two squares are congruent if the side length of one of them is equal to .....

d) Two rectangles are congruent if the dimensions of one of them are ..... dimensions of the other rectangle.

---

10. Put (✓) for the correct statement and (X) for the incorrect one:

a) A square can be congruent to a circle. (.....)

b) 🕮 A square of side length 7 cm can be congruent to a rectangle of dimensions 7 cm and 5 cm. (.....)

c) 🕮 Two right-angled triangles are congruent if the two sides of the right angle in the first triangle equal the two corresponding sides of the right angle in the other. (.....)

d) Two squares are congruent if their side lengths are equal. (.....)

e) Two triangles are congruent if their corresponding sides are equal in length. (.....)

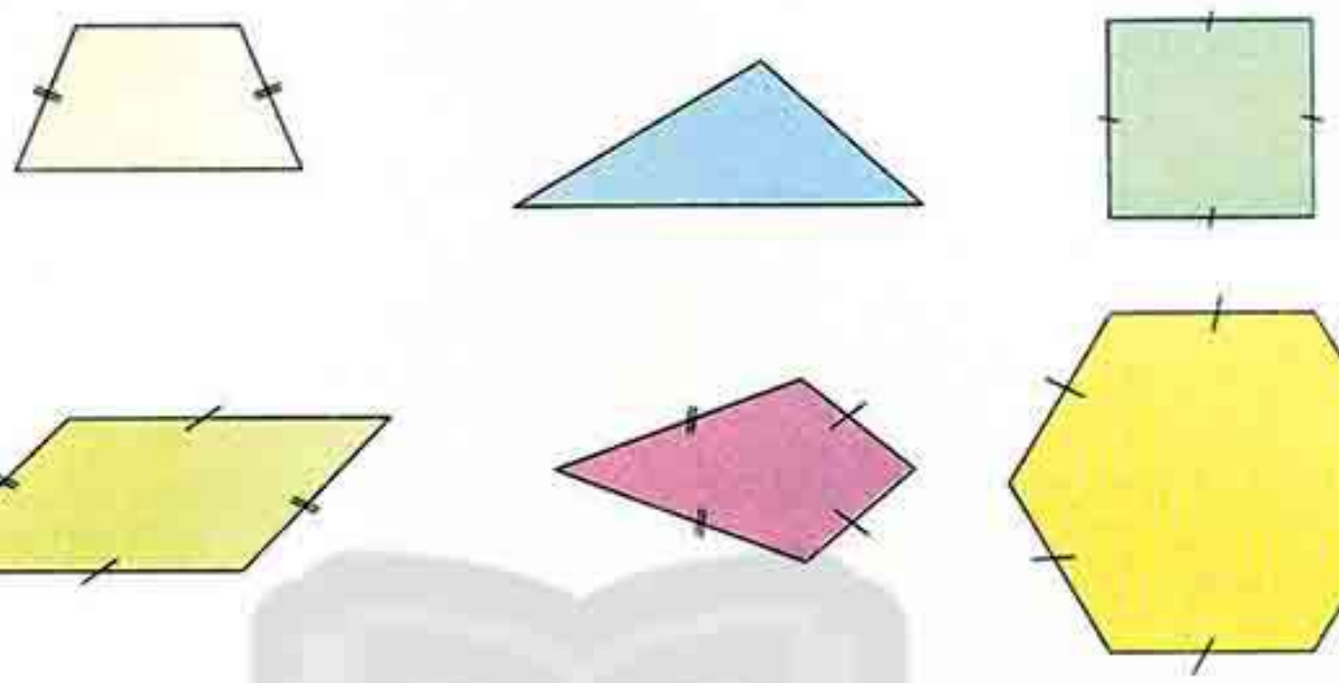
f) The diagonal of the rectangle divides it into two congruent triangles. (.....)

g) 🕮 A scalene triangle can be congruent with isosceles triangle. (.....)

h) Two polygons are congruent if their corresponding sides are equal in length. (.....)

i) Two polygons are congruent if their corresponding angles are equal in measure. (.....)

11. Draw a line in each of the following figures to get two congruent figures if possible:

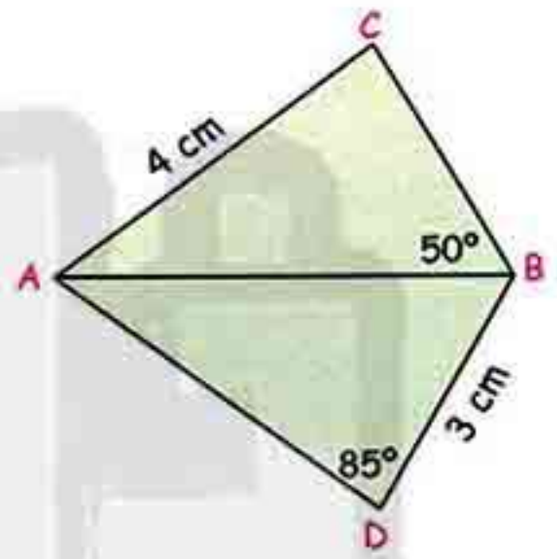


12. In the opposite figure:

If $\Delta ABC \equiv \Delta ABD$, then

a) Find:

1) m ($\angle C$) 2) m ($\angle BAC$)



b) Complete: AD = ... cm and BC = ... cm.

c) Find the perimeter of the figure ACBD.

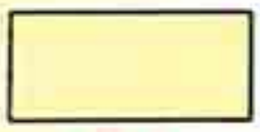
Exercise 2

Symmetrical figures and lines of symmetry

Solve Ex.

1. Are the following figures symmetrical or not? (as the example)

Example:

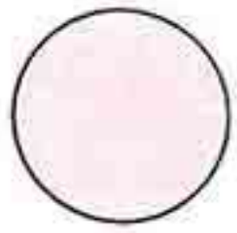


Yes

a)

(.....)

b)



(.....)

c)

(.....)

d)

(.....)

e)

(.....)

f)

(.....)

g)

(.....)

h)

(.....)

2. Write the number of lines of symmetry and draw them (if they exist) as in the example:

Example:

(1)

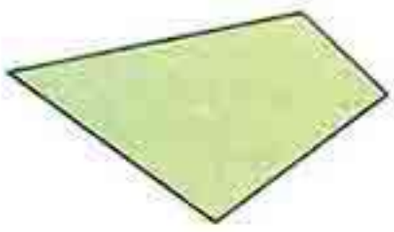
a)

(.....)

b)

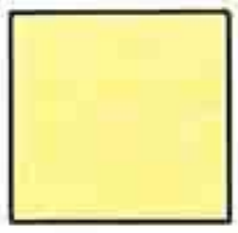
(.....)

c)



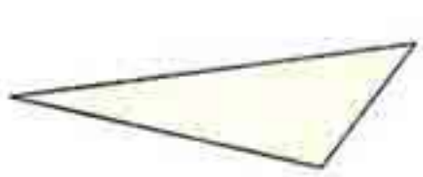
(.....)

d)



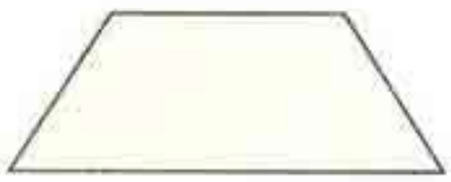
(.....)

e)

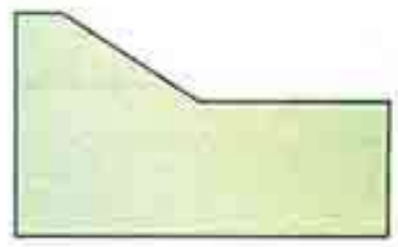


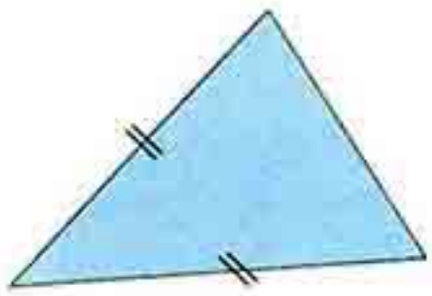
(.....)

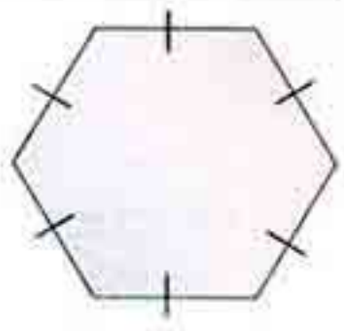
f) (.....)



g)  (.....)

h)  (.....)

i)  (.....)

j)  (.....)

k)  (.....)

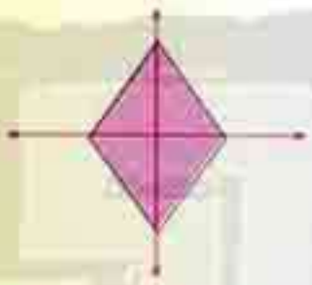
l)  (.....)

m)  (.....)

n)  (.....)

3. Write (symmetrical) or (not symmetrical) and draw the lines of symmetry as the example:

Example:



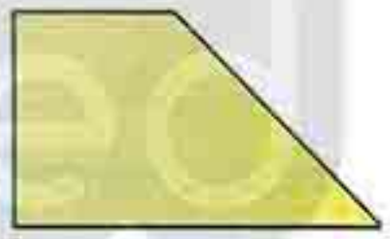
(symmetrical)

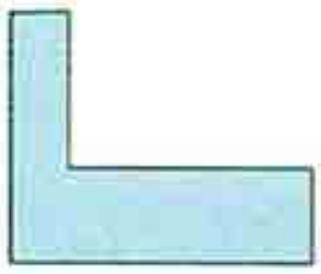
a)  (.....)

b)  (.....)

c)  (.....)

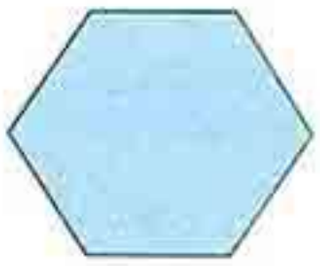
d)  (.....)

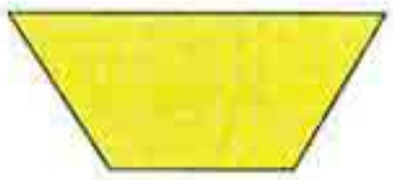
e)  (.....)

f)  (.....)

g)  (.....)

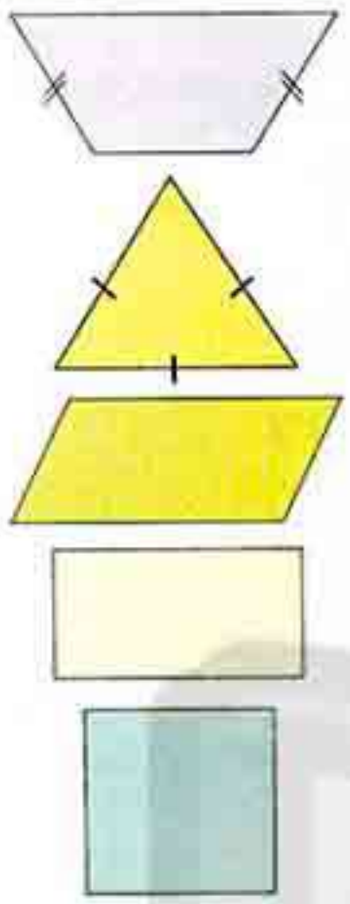
h)  (.....)

i)  (.....)

j)  (.....)

k)  (.....)

4. Join each figure to its number of lines of symmetry:

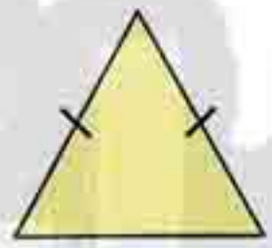


Zero
1
2
3
4

5. Draw the line(s) of symmetry of each of the following figures:

a)

b)



c)

d)

e)

f)

6. Choose the correct answer:

a) The isosceles trapezium has _____ line(s) of symmetry. (1 , 2 , 3 or 4)

b) The diagonal of rectangle divides it into two _____ triangles.
(equal, congruent, parallel or different)

c) The number of lines of symmetry of the rhombus is _____ . (1 , 2 , 3 or zero)

d) The square has _____ line(s) of symmetry. (1 , 2 , 3 or 4)

e) The figure  has _____ line(s) of symmetry. (1 , 2 , 3 or 4)

f) The figure  has _____ line(s) of symmetry. (zero , 1 , 2 or 3)

7. Put (✓) for the correct statement and (X) for the incorrect one:

a) The parallelogram has four lines of symmetry. (.....)

b) The rectangle has four lines of symmetry. (.....)

c) The scalene triangle has three lines of symmetry. (.....)

d) The isosceles trapezium has one line of symmetry. (.....)

e) The square has four lines of symmetry. (.....)

f) The rhombus has four lines of symmetry. (.....)

g) The circle has an infinite number of lines of symmetry. (.....)

---

8. Complete the following:

a) The equilateral triangle has ..... line(s) of symmetry.

b) The square has ..... line(s) of symmetry.

c) The rectangle has ..... line(s) of symmetry.

d) The parallelogram has ..... line(s) of symmetry.

e) The rhombus has ..... line(s) of symmetry.

f) The regular hexagon has ..... line(s) of symmetry.

g) The trapezium has ..... line(s) of symmetry.

h) The regular pentagon has ..... line(s) of symmetry.

i) The isosceles triangle has ..... line(s) of symmetry.

---

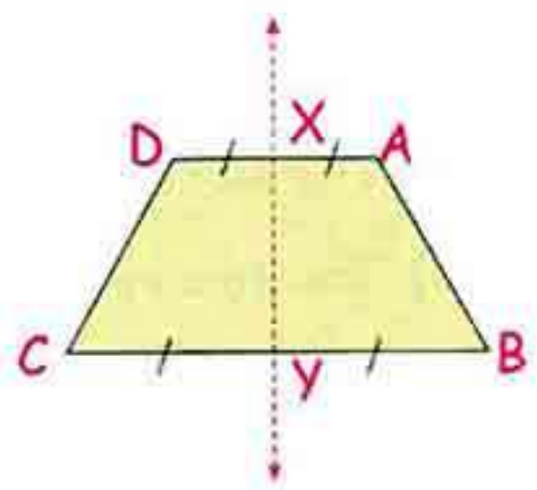
9. Using the opposite figure, complete:

a) $\overleftrightarrow{XY}$ is a line of symmetry of the polygon .....

b) $\overline{XA} \equiv$ ..... , $\overline{YB} \equiv$ .....

c) $\overline{AB} \equiv$ .....

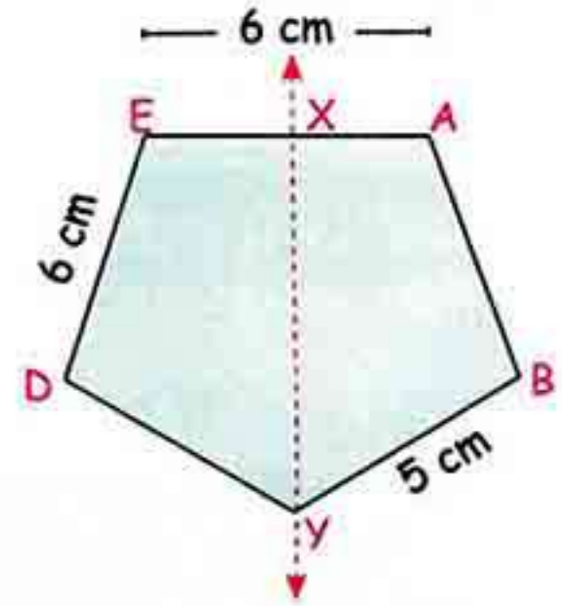
d) The polygon ABYX ≡ .....



10. In the opposite figure:

If $\overleftrightarrow{XY}$ is a line of symmetry of the polygon ABYDE,

AE = 6 cm, DE = 6 cm and BY = 5 cm, then:



Complete:

a) ∠B ≡ ∠ .....

b) ∠A ≡ ∠ .....

c) DY = ... = ... cm

d) The perimeter of the figure ABYDE = ... cm

---

11. In the opposite figure:

If $\overleftrightarrow{CF}$ is a line of symmetry of the regular hexagon ABCDEF, then:

Complete:

a) AB = ... cm.

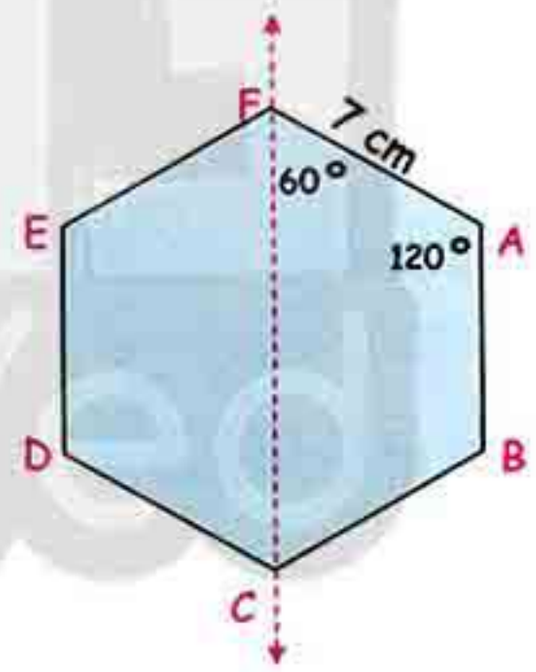
b) m (∠E) = m (∠ .....) = ... °

c) m (∠CFE) = m (∠ .....) = ... °

d) The perimeter of ABCDEF = ... cm.

e) The figure ABCF is called ..... .

f) The polygon ABCF ≡ the polygon ..... .



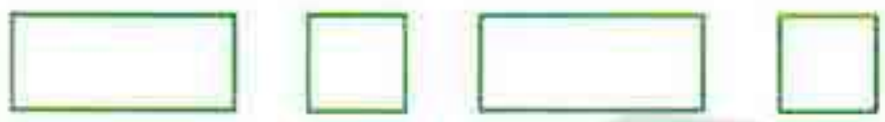
Solve Ex.

Exercise 3

Visual patterns

1. Choose the correct figure to complete the pattern:

a)  ..... (△ or ○ or □ or ▽)

b)  ..... (▭ or △ or ○ or □)

c)  ..... (☆ or △ or ▽ or ⬠)

d)  ..... (▭ or ⇨ or ⬠ or ⇦)

e)  ..... (⇨ or ⇧ or ▭ or ☆)

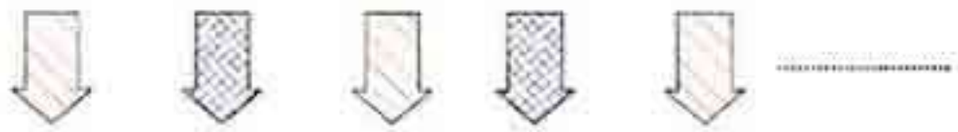
f)  ..... (△ or ○ or □ or ▭)

g)  ..... (☆ or △ or ○ or □)

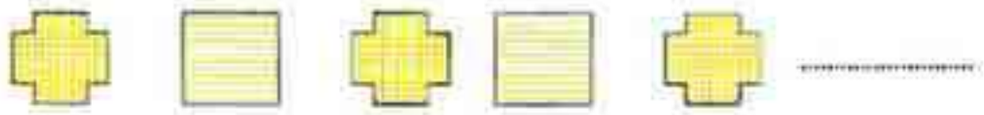
h)  ..... (☆ or ○ or △ or ⬠)

i)  ..... (▭ or ⇨ or ⬠ or △)

j)  ..... (⇨ or ♡ or ⇧ or ☆)

k)  ..... (⇩ or ⇩ or ⇧ or ⇧)

l)  ..... (◎ or ▩ or ♡ or ◎)

m)  ..... (✚ or ▤ or ✚ or ▤)

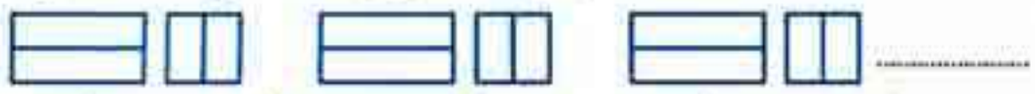
2. Complete in the same pattern:

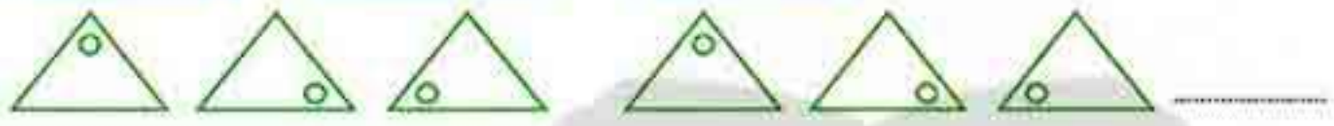
a) □□○ □□○ □□○ .....

b) ♡☆♡☆♡☆ .....

c) 1 , 1.1 , 1.2 , 1.3 , ...

d) $\frac{1}{3}$, $\frac{1}{6}$, $\frac{1}{12}$, $\frac{1}{24}$, ...

e)  .....

f)  .....

g) + − − + − − + − − .....

h) x ÷ x ÷ x ÷ .....

i) 2.2 , 3.3 , 4.4 , ...

j)  .....

3. Complete in the same pattern:

a) 6.66 , 5.55 , 4.44 , ... , ...

b) 15 , 15.2 , 15.4 , ... , ...

c) ab , abb , ab bb , ab bbb , ... , ...

d) 11 , 11.5 , 12 , ... , ...

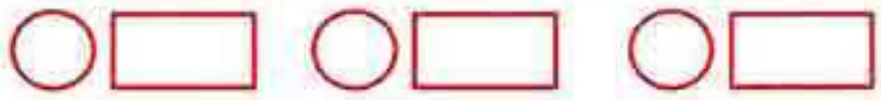
e) ab , abc , abcd , ... , ...

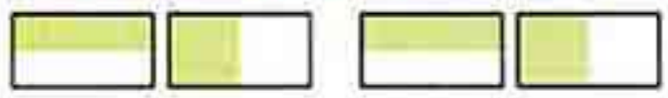
f) 12.3 , 23.4 , 34.5 , ... , ...

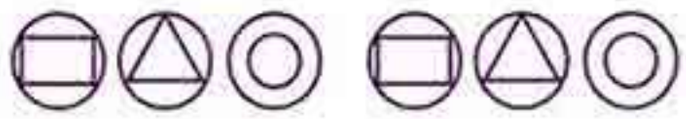
g) 📖 +x , +xx , +xxx , +x , ... , ...

h) 📖 10 , 9.6 , 9.2 , 8.8 , ... , ...

4. Discover the rule and complete:

a)  .....
The rule is: .....

b)  .....
The rule is: .....

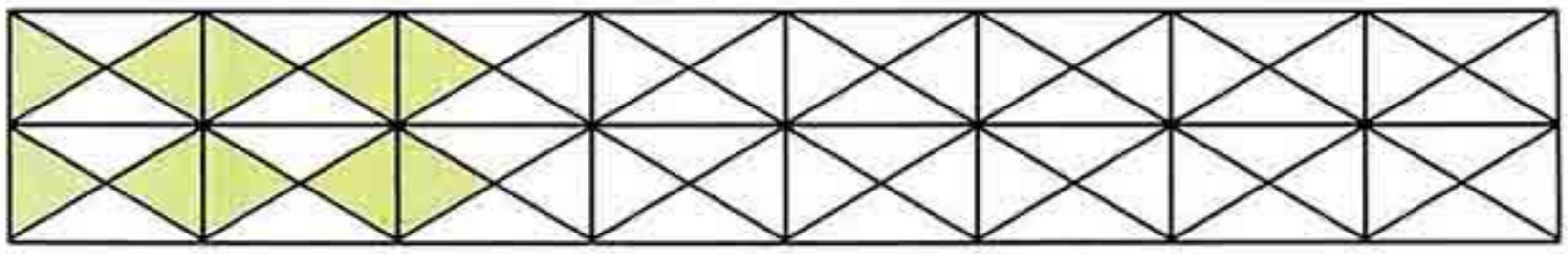
c)  .....
The rule is: .....

d) $\frac{1}{3}$, $\frac{1}{9}$, $\frac{1}{27}$ .....
The rule is: .....

e) 100 , 99.5, 99, 98.5 .....
The rule is: .....

5. Complete the patterns:

a)

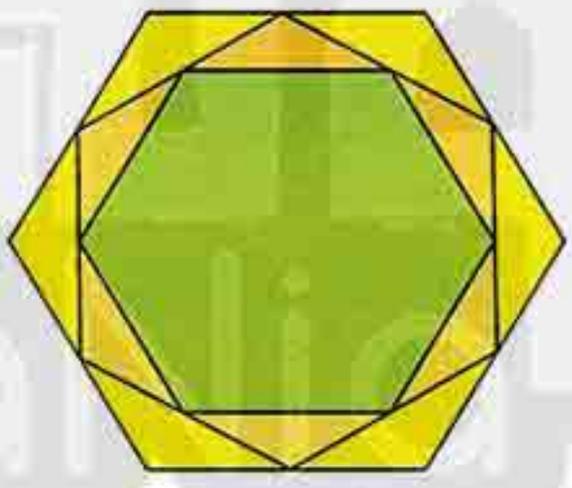


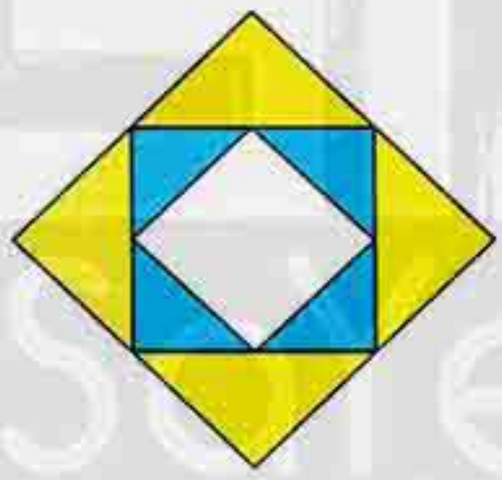
b)

			.....	.....	.....	.....	.....	.....
			.....	.....	.....	.....	.....	.....
			.....	.....	.....	.....	.....	.....

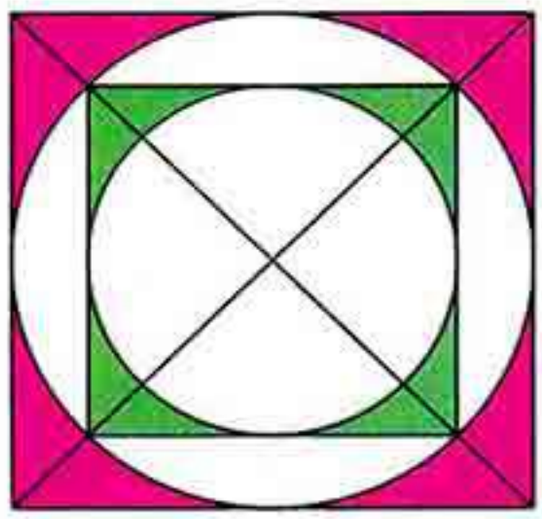
c)

6. 🕮 In each of the following figures, discover the pattern and then complete by drawing one figure that follows the same pattern.





7. 🕮 Discover the pattern, then draw two figures and complete colouring according to the pattern.



discover اكتشف

General Exercises on Unit 2

1. Choose the correct answer from those between brackets:

a) The number of lines of symmetry of the rectangle = ... (zero , 4 , 2 or 3)

b) The number of lines of symmetry of an isosceles triangle is ..... (1 , 2 , 3 or 4)

c) There are ..... line(s) of symmetry in the square. (four , three , two or one)

d) The number of lines of symmetry of the rhombus is .....
(four , three , two or one)

e) The isosceles trapezium has ..... line(s) of symmetry. (3 , 2 , 1 or 4)

---

2. Put the suitable sign (< , > or =):

a) The no. of lines of symmetry in ☐ the no. of lines of symmetry in the square ☐ rectangle.

b) The no. of lines of symmetry in the square ☐ the no. of lines of symmetry in the rhombus.

---

3. Complete each of the following:

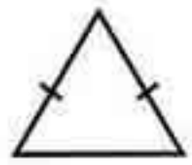
a) The two squares are congruent if the side length of one of them = ...

b) Two polygons are congruent if their corresponding sides are .....

c) The number of lines of symmetry of an equilateral triangle = ...

d) The rhombus is a ..... figure whose sides are .....

e) The number of lines of symmetry of the opposite figure is .....



f) There are ..... line(s) of symmetry in the square.

4. Put (✓) or (✗):

a) It is possible for an acute-angled triangle to be congruent to a right-angled one. ( )

b) The parallelogram has four lines of symmetry. ( )

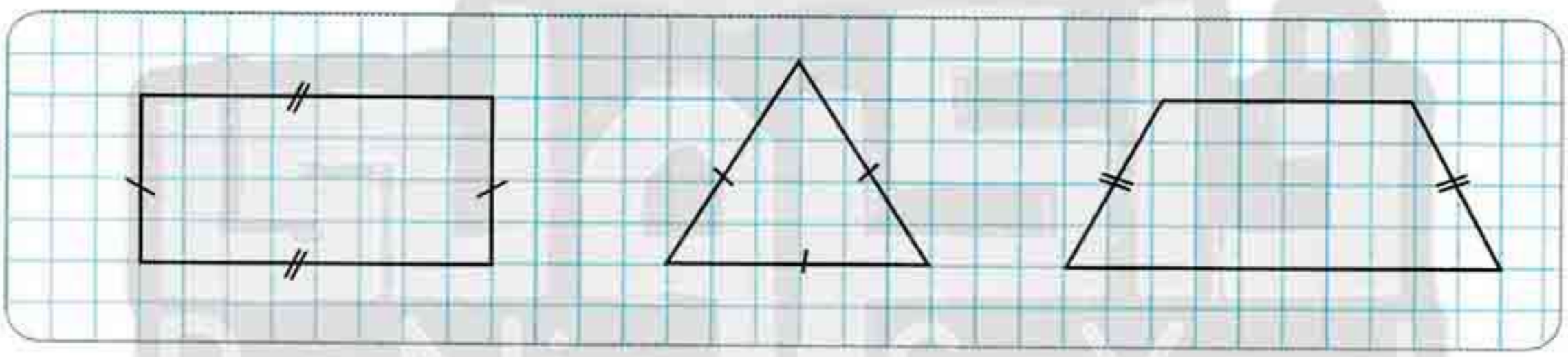
c) Two polygons are said to be congruent if only their corresponding sides are equal in length. ( )

d) The square has 4 lines of symmetry. ( )

e) The rectangle has four lines of symmetry. ( )

---

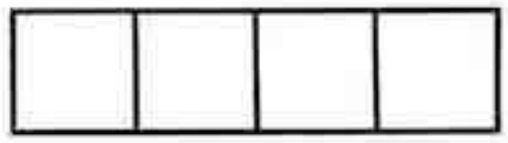
5. Draw the lines of symmetry of each of the following shapes:

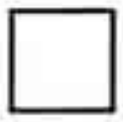


Basic Cumulative Skills on Unit (2) (TIMSS)

First Choose the correct answer from those between brackets:

1. The area of the opposite shape



= ..... 

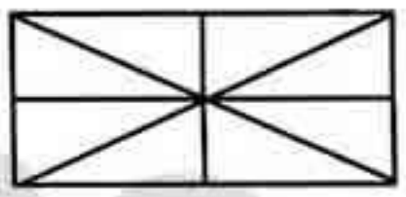
a) 6 b) 8 c) 4 d) 15

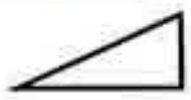
2. In the opposite figure the number of congruent

triangles = ...

a) 3 b) 5 c) 6 d) 7

3. The area of the opposite shape



= ..... 

a) 7 b) 8 c) 9 d) 10

4. The surface area of a square with side length 6 cm =.....

a) 12 cm b) 36 cm c) 36 cm² d) 12 cm²

Second Complete each of the following:

5. The perimeter of a square of side length 1cm = ...

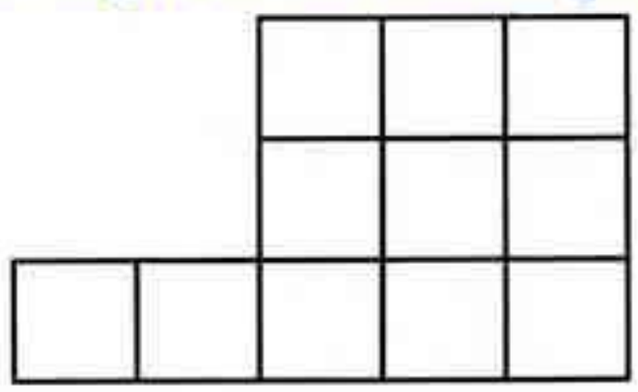
6. If the perimeter of a square 28 cm, then its side length = ...

7. The perimeter if the equilateral triangle of side length 7 cm = ...

Thrird Answer the following:

8. Find the perimeter and the surface area of rectangle with dimensions 4 cm and 6 cm.

9. Find the perimeter of the following shape if the unit of length is the side length of the small square.



Unit Test 2 on Unit

1 Choose the correct answer from the given ones:

(1) The rectangle has ..... lines of symmetry.

a) 2 b) 4 c) 6 d) 8

(2) The square has ..... lines of symmetry.

a) zero b) 2 c) 4 d) 3

(3) If △ MNL ≡ △ PQR, then $\overline{ML}$ ≡ ..... .

a) $\overline{MN}$ b) $\overline{PQ}$ c) $\overline{GR}$ d) $\overline{PR}$

(4) The number of lines of symmetry of the equilateral triangle is .....

a) zero b) 1 c) 2 d) 3

(5) In a rectangle, the diagonal divides it in two ..... triangles.

a) congruent b) different c) equilateral d) isosceles

(6) A square of side length 7 cm is congruent to ..... .

a) a rectangle of dimensions 7 cm and 5 cm.

b) an isosceles △ whose sides lengths are 7 cm, 7 cm and 5 cm.

c) a square of side length 7 cm

d) a rhombus of side length 7 cm

(7) The number of lines of symmetry of the rhombus is .....

a) 1 b) 2 c) 3 d) 4

(8) The number of lines of symmetry of the isosceles triangle is .....

a) 1 b) 2 c) 3 d) 4

---

2 Complete each of the following:

(9) Two rectangles are congruent if ..... .

(10) Two polygons are congruent if their corresponding sides are .....

in length and their corresponding ..... are equal in measure.

Exercise 1

Capacity

Solve Ex.

1. Arrange the following objects ascendingly according to the capacity of each one: as the example:

Example:

(1)

(3)

(2)

a)

b)

c)

d)

2. Choose the nearest capacity for each of the following from that between brackets:

a)

A cub of coffee

($\frac{1}{4}$ liter or $\frac{1}{8}$ liter)

b)

A tea kettle

(1 liter or 15 liters)

c)

A spoon

(2 mL or 20 liters)

d)

A juice can

($\frac{1}{4}$ mL or 1 liter)

e)

A bottle of milk

($\frac{1}{2}$ mL or $\frac{1}{2}$ liter)

f)

A bathtub

(150 liters or 3 liters)

g)

A glass of tea

(200 liters or 200 mL)

h)

An aquarium

(20 mL or 8 liters)

i)

A waterless

(8 mL or 8 liters)

3. Choose the suitable unit for measuring the capacity of each of the following:

a) The capacity of a bottle of medicine
- L
- mL
- 6 cm

b) The capacity of a cup of coffee .....
- L
- ml
- Km

c) The capacity of a water tank .....
- L
- mL
- m

d) The capacity of a bucket of water .....
- L
- ml
- dm

4. 🕮 **Choose the correct answer:**

a) The capacity of a glass of water ..... . (3 liters , 25 mL or 250 mL)

b) The average water consumption for a person in one day is ..... .

(15 liters , 1500 liters or 1500 milliliters)

c) The amount of milk used daily by a family of four persons is ..... .

(50 liters , 500 liters or 2000 milliliters)

d) The liter is the capacity of a vessel in the shape of a cube with edge length = ... cm.

(1 cm , 10 cm or 100 cm)

---

5. **Complete:**

1) 8 liters = ... mL.

2) 6.5 liters = ... mL.

3) 4.25 liters = ... mL.

4) 37.5 dm^3 = ... cm^3

5) 0.750 dm^3 = ... cm^3.

6) 1.125 dm^3 = ... cm^3.

7) 4000 mL = ... liter(s).

8) 3470 mL = ... liter(s).

9) 9275 cm^3 = ... dm^3.

10) 132500 cm^3 = ... dm^3.

11) 🕮 7000 mL = ... L.

12) 🕮 20 mL= ..... L.

13) 🕮 20 liters = ... milliliters.

14) 🕮 $7\frac{1}{2}$ liters = ... milliliters.

15) 🕮 20 mL = ... L.

16) 🕮 1 mL = ... L.

17) The unit of measuring capacity is ..... .

18) 2 liters, 3000 mL = ... mL.

19) 3 liters, 250 mL = ... mL.

20) 2.5 dm^3, 500 cm^3 = ... mL.

21) $8\frac{1}{2}$ liters, 500 cm^3 = ... dm^3.

22) 8750 cm^3, $\frac{1}{4}$ liter = ... dm^3.

23) ..... liters, $\frac{1}{2}$ dm^3 = 3500 cm^3.

average متوسط | consumption استهلاك

6. Put the suitable sign (< , = or >):

a) 📖 $\frac{1}{4}$ liter ..... 245 mL

b) 0.875 liters ..... 875 mL

c) 📖 750 mL ..... $\frac{3}{4}$ liter

d) 1.4 liters ..... 140 cm^3

e) 3500 cm^3 ..... 3.5 dm^3

f) 18 dm^3 ..... 1800 cm^3

g) 📖 3000 mL ..... 30 liters

h) 📖 500 mL ..... $\frac{1}{3}$ liters

---

7. Which is greater in capacity?

a) A water tank of capacity 50 liters **or** another one of capacity 48000 mL.

b) An aquarium of capacity 2500 mL **or** another one of capacity 25L.

---

8. Arrange in ascending order:

a) 9750 mL , 10 liters , 7000 mL and 12 $\frac{1}{2}$ liters.

b) $\frac{1}{2}$ liter , 450 cm^3 , 1750 mL and 2 cm^3.

c) 6000 mL , 5 dm^3 , 4500 cm^3 and 3 $\frac{3}{4}$ liters.

---

9. Arrange in descending order:

a) 📖 8.75 liters , 9000 mL , 6500 mL and 5 liters.

b) 350 mL, 2L , 1250 mL and $\frac{3}{4}$ liter.

c) 9 liters , 9500 mL , 7500 cm^3 and 8.9 liters.

Exercise 2

Weight

Solve Ex.

1. Underline the better estimate of weight in each of the following:

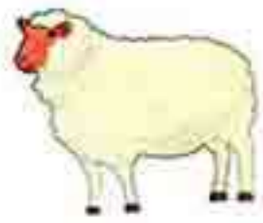
a)

(5 gm, 150 gm or $\frac{1}{2}$ kg)

b)

(2 tons, 200 kg or 50 kg)

c)



(300 kg, 70 kg or 1 ton)

d)

(50 gm, 500 gm or 700 gm)

e)

(150 gm, 150 kg or 150 tons)

f)

(10 gm, 250 gm or 750 gm)

g)

(3 kg, 20 kg, 200 kg)

h)

(3 gm, 3 kg, 3 tons)

i)

(2 kg, 15 kg, 200 kg)

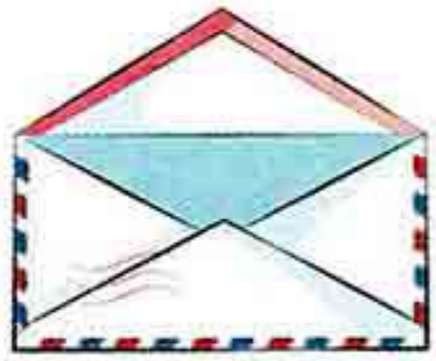
j)

(100 gm, 500 kg, 10 tons)

k)

(15gm, 1kg, 5kg)

l)



(10 gm, 20 kg, 20 tons)

2. Match each picture with its suitable weight:

a) 

5 gm

b) 

500 kg

c) 

5 tons

d) 

5000 gm

3. Write the suitable unit of weight (ton or kg or gm):

a) Buying rice and meat for a family. (.....)

b) Buying a gold ring for the Mother's Day. (.....)

c) Buying iron to build a house. (.....)

4. Choose the suitable answer:

a) The weight of a pupil in Grade Four ..... . (1 ton , 40 kg or 90000 gm)

b) The weight of a chicken is ..... . ($\frac{1}{4}$ ton , 2 kg or 100 gm)

c) The heaviest weight a bridge can carry is ..... . (10 tons , 100 kg or 150000 gm)

d) The weight of a present of jewellery is ..... . ($\frac{1}{2}$ ton , 105 kg or 15 gm)

e) A truck can be loaded with ..... . (2 tons , 20 kilograms or 3500 grams)

f) My father's weight is ..... . (one ton , 95 kilograms or 80 grams)

5. Complete the following:

a) 1 ton = ... kg.

b) 1 kg = ... ton.

c) 1 kg = ... gm.

d) 1 gm = ... kg.

e) 70 kg = ... gm.

f) 1000 gm = ... ton.

g) 10 tons = ... kg.

h) 60 gm = ... kg.

i) 2 kgs = ... gm.

j) 7 tons = ... kg.

k) 4600 gms = ... kg.

l) 1 tons = ... kg = ... gm.

m) ..... tons = 25 kg = ... gm.

n) .... tons = ... kg = 30000 gm.

bridge كوبرى | ring خاتم

6. Put the suitable sign (< or = or >):

a) $\frac{1}{2}$ ton ..... 500 kg

b) $1\frac{1}{4}$ tons ..... 1250 kg

c) 3.75 tons ..... 3751 kg

d) 9.805 tons ..... 9894 kg

e) 785 kg ..... 0.8 ton

f) 0.75 ton ..... 749 kg

g) $3\frac{1}{2}$ kg ..... 3500 gms

h) $7\frac{1}{4}$ tons ..... 7.750 kg

i) 3500 kg ..... 2.5 tons

j) 750 gm ..... $\frac{1}{2}$ kg

7. Arrange the following in descending order:

a) 4.7 tons , 4710 kg , 4469000 gm. .....

b) $\frac{1}{5}$ ton , 205 kg , 204000 gm. .....

c) 2.67 tons , 2675 kg , 2350000 gm. .....

Life Problems

8. A family eats one and a half kilograms of meat every week. If the price of one kilogram is 140 pounds, **how much money does this family pay for meat in a week?**

9. A man bought a golden ornament for his wife.
If the weight of the present is 40 gm, and the price of one gram of gold is L.E. 550,
how much money did the man pay?

10. A family of 5 persons eats 2 kg of fish every week.
The price of fish is L.E. 28 for a kilogram.
How much money does this family pay for fish in a month?

11. A man bought 8 tons of iron for building his family house. If the price of 1 kilogram of iron is L.E. 12, find:

d) the price of one ton of iron.

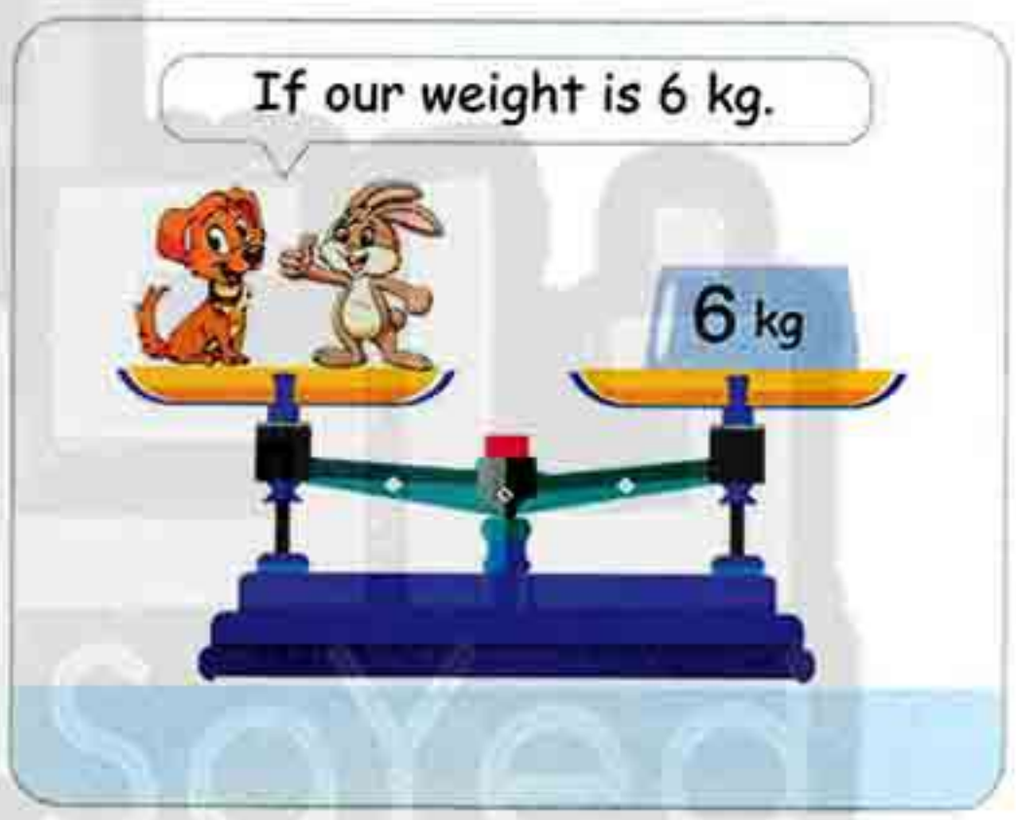
e) the money paid for the iron he bought.

ornament حلية | gold ذهب

12. A family of 7 persons eat monthly 5 kilograms of bananas, 2 kilograms of apples, 6 kilograms of oranges and 4 kilograms of guavas.
The prices for one kg are as shown as follows:
L.E. 10 for bananas , L.E. 15 for apples ,
L.E. 8 for oranges and L.E. 9 for guavas.
How much money does this family pay for fruits?

Critical thinking

13. Find our weight together:



Solve Ex.

Exercise 3

Time

1. Choose the correct answer:

a) The time of travelling from Cairo to Ismailia is ..... .
($1\frac{1}{2}$ hours , $\frac{1}{2}$ an hour or 50 minutes)

b) To wear your clothes you take ..... . (1 hour , 5 minutes or 75 seconds)

c) To have lunch you take ..... . (75 seconds , $\frac{1}{3}$ an hour or $1\frac{1}{2}$ hours)

d) I watched a new film for ..... . ($\frac{1}{2}$ day , 2 hours or 3 minutes)

e) 🕮 Doing my homework yesterday takes ..... . ($\frac{1}{2}$ day , 2 hours or 3 minutes)

f) 🕮 A person sleeps daily for about ..... . (500 seconds , 500 minutes or 100 minutes)

g) 🕮 An employee works daily for ..... . (360 seconds , 48 minutes or $\frac{1}{2}$ days)

h) 🕮 Preparing Friday breakfast takes ..... . ($\frac{1}{2}$ day , $\frac{1}{2}$ an hour or 30 seconds)

i) The daily time taken by a student to watch T.V. is ..... . (day , one hour or second)

j) The suitable unit using in estimating the time taken by the winner in a running race of 100 meters is ..... . (day , hour or second)

k) The suitable unit using in estimating the time taken for a football match is ..... .
(day , minute or second)

---

2. Complete each of the following:

a) 5 hours = ... minutes.

b) $2\frac{1}{2}$ hours = ... minutes.

c) 1 minute = ... hour.

d) 1 hour = ... day.

e) 1 second = ... minute.

f) $1\frac{1}{4}$ days = ... hours.

g) 1 day = ... minutes.

h) $4\frac{1}{2}$ minutes = ... seconds.

i) 2 days = ... hours.

j) 1 day = ... hours.

k) $\frac{1}{2}$ day = ... hours.

l) $\frac{1}{3}$ day = ... hours.

employee موظف

m) $\frac{1}{4}$ day = ... hours.

n) $\frac{1}{6}$ day = ... hours.

o) $\frac{1}{8}$ day = ... hours.

p) 24 hours = ... days.

q) 48 hours = ... days.

r) 36 hours = ... days.

s) 1 day = ... hours = ... minutes.

3. Complete each of the following:

a) 80 minutes = ... hours + ... minutes

b) 135 minutes = ... hours + ... minutes

c) 200 minutes = ... hours + ... minutes

d) 240 minutes = ... hours + ... minutes

e) 210 minutes = ... hours + ... minutes

4. Complete:

a) 1 day and 3 hours = ... hours.

b) 10 hours and 40 minutes = ... minutes.

c) 3 days and 240 minutes = ... days.

d) $\frac{3}{4}$ hour and 10 minutes = ... minutes.

e) 120 minutes and 3600 seconds = ... hours

5. Arrange the following in ascending order:

a) 300 minutes , 19000 seconds , 4 hours.

b) 1440 minutes , 3600 seconds , $\frac{1}{3}$ day.

c) $\frac{1}{2}$ day , 10 hours , 4800 minutes.

6. Arrange the following in descending order:

a) $\frac{2}{3}$ day , 18 hours , 1020 minutes.

b) 3000 minutes , 5 hours , 1800 seconds.

c) $1\frac{1}{2}$ days , 30 hours , 3600 minutes.

7. 🕮 **Put the suitable sign (< , = or >):**

a) $\frac{3}{4}$ hours ..... 50 minutes.

b) $\frac{1}{3}$ day ..... 7 hours.

c) $\frac{2}{3}$ hour ..... 2600 seconds.

d) 120 seconds ..... 3 minutes.

e) 2 hours ..... 9000 seconds.

f) $\frac{1}{10}$ hour ..... 360 seconds.

g) 72 hours ..... three days.

---

8. 🕮 **Complete:**

a) Some units of measuring time are ....., ... and, ..., ...

b) 1 day = ... hours, 1 hour = ... day.
1 hour = ... minutes, 1 minute = ...
1 minute = ... seconds, 1 second = ... minute.

c) day = ... hours = ... x ..... minutes = ... minutes.
1 hour = ... minutes = ... x ..... seconds = ... seconds.
1 day = ... minutes = ... x ..... second = ... second.

Life Problems

9. Mai's birthday is on 3 / 4 / 1987. **What is her age on 15 / 11 / 2012?**

10. A train started to move from Cairo at 6 : 45 a.m and it arrived in Beni-Suef at 8 : 30 a.m. in the same day.

How long did the trip take?

11. A football match started at 3 : 00 p.m.

The time of the match was 90 minutes,

$\frac{1}{4}$ hour is a rest,and the wasted time was 5 minutes.

What was the time at the end of the match?

12. 🕮 Mona used to ride her bike in the weekends. Once she rode it at  and finished at  .

How long did she ride her bike on that day?

13. 🕮 **If Mazen's birthday was on 17/5/1999, what would his age be on 1/10/2009?**

14. 🕮 **An engineer works for 8 hours daily in an investment company, and his salary is L.E. 20 for an hour, find his salary:**

a) in a week.

b) in 7 weeks

(Knowing that: he works 5 days a week)

engineer	مهندس	rest	راحة	p.m.	مساءً
		salary	مرتب	investment	استثمارى

UNIT 3

General Exercises on Unit 3

1. Choose the correct answer from those between brackets:

a) $\frac{2}{3}$ a day = ... hours. (16 , 15 , 6 or 18)

b) Third of a day = ... hours. (12 , 3 , 8 or 15)

c) 4.5 tons = ... kg. (45 , 54 , 4500 or 5400)

d) One day = ... minutes. (3600 , 60 , 24 or 1440)

e) 14 days and 4 weeks = ... weeks. (2 , 4 , 5 or 6)

f) 25 decimeters cube = ... ($\frac{15}{5}$ liters , 25 liters , $\frac{1}{4}$ liter or 25 milliliters)

g) $25\frac{1}{3}$ kg. $\simeq$ ..... to the nearest kg. (26 , 24 , 25 or $\frac{76}{3}$)

h) 3750 cm. = ... meters. (3.75 , 373 , 375000 or 37.5)

i) The liter is the capacity of a vessel in the shape of a cube with edge length = ...
(1 cm , 10 cm , 100 cm or 1000 cm)

j) $\frac{3}{4}$ of the day = ... minutes. (1080 , 180 , 100 or 1800)

k) $\frac{1}{2}$ liter = ... cm^3. (500 , 5000 , 50 or 50000)

---

2. Put the suitable sign (< , = or >):

a) $\frac{3}{4}$ hour ..... 75 minutes

b) 5 tons ..... 5000 gm

c) $4\frac{3}{4}$ pounds ..... 475 piasters

d) 0.5 kg ..... 750 gm

e) $\frac{1}{3}$ of the day ..... 7 hours

f) 9800 milliliters ..... 9.8 liters

g) 84 hours ..... 5 days

h) 5400 piasters ..... 54 pounds

i) A liter ..... 100 milliliters

j) 100 gm ..... kg

k) 8780 kg ..... 9 tons

l) 1.25 liters ..... 9 dm^3

3. Complete each of the following:

a) 4750 milliliters = ... liters.

b) $4\frac{3}{100}$ = ... (a decimal number)

c) 32 days ≃ ..... . (to the nearest week)

d) 5 tons = ... kg.

e) 8500 milliliters = ... liter(s).

f) 540 piasters = ... pounds.

g) The third of the day = ... hours.

h) A liter = ... milliliter(s).

i) A minute = ... seconds.

---

4. Put (✓) for the correct statement and (✗) for the incorrect one:

a) 9.7 liters = 9.700 decimeters cube. ( )

b) 2.5 days = 60 hours. ( )

---

5. Arrange ascendingly:

a) (37 hours, $\frac{1}{2}$ day and 2225 minutes)

b) (4 liters, 4700 milliliters and 4.5 dm^3)

c) (8750 kg, 9 tons and 8740000 gm)

---

6. Answer the following:

1. A man bought 8 tons of iron for building a house. If the price of one kg of iron is 9 pounds.

   Find: **a)** The price of one ton of iron.

   b) The price of the quantity of iron which the man bought.

2. A road of length 55 km, if 25.78 km of it was paved. How long is the part which was left without paving?

UNIT 3

Basic Cumulative Skills on Unit (3) (TIMSS)

First Choose the correct answer from the given ones:

1. The suitable unit for measuring the weight of an egg is .....

a) cm b) mm c) gm d) kg

2. If Ahmed is 1.8 meters tall and his sister is half of his height then the height of his sister = ...

a) 0.4 m b) 0.8 m c) 0.9 m d) 1.4 m

3. The weight of an elephant can be .....

a) 40 kg b) 250 gm c) 4 tons d) 5000 gm

4. If a family saw a film which started at 5:30 p.m. and it finished at 8:45 p.m. then the time passed = ...

a) 3 hours b) 2 hours and 10 minutes
c) 4 hours d) 3 hours and 15 minutes

5. The suitable length of your notebook is .....

a) 5 cm b) 30 cm c) 1 cm d) $\frac{1}{2}$ km

6. 300 minutes = ... hours

a) 5 b) 4 c) 4 d) 2

Second Answer the following:

7. How many sceonds are there in 1 hour?

8. How many hours are there in a week?

9. Arrange the following lengths ascendingly:

3 km, 2550 m, 4750 m, 1 million cm.

Unit Test 3 on Unit

1 Choose the correct answer from those between brackets:

1. 3 litres = ... millilitres. (3 or 30 or 300 or 3000)
2. A quarter of a day = ... hours. (4 or 6 or 8 or 12)
3. 6.5 tons = ... kg. (650 or 6500 or 6050)
4. 14 days and 4 weeks = ... weeks. (3 or 4 or 5 or 6)
5. 2 weeks = ... days. (14 or 36 or 48 or 120)
6. 4.8 litres = ... dm^3. (4800 or 4.8 or 480 or 48000)
7. 2.5 tons = ... 2250 kg. (> or < or =)
8. $\frac{1}{4}$ litre = ... mL. (250 or 300 or 450)

2 Complete each of the following:

9. The litre = ... millilitres.
10. $\frac{1}{2}$ litre = ... cm^3.
11. $\frac{1}{4}$ km = ... metres.
12. One minute = ... seconds.

3 Answer the following:

13. Arrange the following in ascending order:
    9 kg, 8000 gm, $5\frac{1}{2}$ kg and 7500 gm.
    The order is: ..... , ... , ... , ...
14. Arrange the following in descending order:
    $4\frac{1}{2}$ litre , 2500 mL, 6 litres, 3000 mL.
    The order is: ..... , ... , ... , ...

Worksheet 6 — Till Lesson (4) - Unit (1)

..... / 20

1 Choose the correct answer: ..... / 5

a) $4\frac{3}{5}$ = ... (4.45 *or* 4.6 *or* 4.3 *or* 4.4)

b) The value of the digit 3 in the number 59.34 is ..... (3 *or* 30 *or* 0.3 *or* 0.03)

c) 9.75 = ... ($\frac{975}{10}$ *or* $\frac{39}{4}$ *or* $\frac{975}{1000}$ *or* otherwise)

d) 0.15 < ..... < 0.16 (0.65 *or* 0.55 *or* 0.015 *or* 0.153)

e) 50 hundredths ..... 5 tenths. (< *or* = *or* > *or* ⩽)

---

2 Complete each of the following: ..... / 5

a) $5\frac{3}{8}$ = ... "in the decimal form"

b) 7.08 = ... $\frac{\text{.....}}{\text{.....}}$

c) 10 – 5.7 = ...

d) The value of the digit (7) in the number 2.17 is .....

e) ..... + 29.35 = 50

---

3 Find the result of each of the following: ..... / 6

a) 12.15 + 79.532

b) 617.8 – 113.567

c) 25.3 + 17.46 + 5.26

d) 75350 ÷ 1000

e) 835 ÷ 10

f) 8657 ÷ 100

---

4 Peter has P.T. 475 and his friend Ali has L.E. 3.5. How many pounds do they have together? ..... / 4

Worksheet 1 — Till Lesson (5) - Unit (1)

..... / 20

1 Complete each of the following: ..... / 5

a) 1 = 0.4 + ...

b) 86.7 − 13.4 = ...

c) 9382 ≃ ..... (to the nearest ten)

d) 4357 ≃ ..... (to the nearest hundred)

e) 6843 ≃ ..... (to the nearest thousand)

---

2 Choose the correct answer: ..... / 5

a) The value of the digit (7) in the number 123.579 is ..... (7 *or* 70 *or* 700 *or* 0.07)

b) 5948 ≃ 6000 (to the nearest .....) (10 *or* 100 *or* 1000 *or* 10000)

c) $\frac{64}{80}$ = ... (0.8 *or* 0.08 *or* 0.008 *or* 80)

d) 42819 ÷ 100 = ... (42.819 *or* 428.19 *or* 4281.9 *or* 42819)

e) $\frac{1}{3} + \frac{1}{4}$ = ... ($\frac{2}{7}$ *or* $\frac{7}{12}$ *or* $\frac{11}{12}$ *or* 1)

---

3 Approximate each of the following: ..... / 5

a) 5675.4 (to the nearest 10)

b) 70546.4 (to the nearest 100)

c) 12736.25 (to the nearest 1000)

d) 8127 (to the nearest 10 000)

---

4 Find the result, then approximate it: ..... / 5

a) 7235 + 7069 = ... ≃ ..... (to the nearest 1000)

b) 897.8 − 13.2 = ... ≃ ..... (to the nearest 100)

c) 26.32 − 1.27 = ... ≃ ..... (to the nearest 10)

Worksheet 8 — Till Lesson (6) - Unit (1)

..... / 20

..... / 8

1 Complete each of the following:

a) 0.4 + ... = 0.9

b) 63.6 ≃ ..... (to the nearest unit)

c) $4\frac{17}{20}$ ≃ ..... (in the decimal form)

d) 9.345 ≃ ..... (to the nearest tenths)

e) 0.273 = 0.☐ + 0.☐☐ + 0.☐☐☐

f) 7.98 + 12.237 = ... ≃ ..... (to the nearest $\frac{1}{10}$)

g) 24.05 − 4.97 = ... ≃ ..... (to the nearest unit)

h) 28437 ÷ 100 = ... ≃ ..... (to the nearest 100)

2 Choose the correct answer

..... / 4

a) $5\frac{1}{4}$ = ... (5.4 *or* 5.25 *or* 5.1 *or* 0.54)

b) $\frac{23}{2}$ = ... (11.5 *or* 11.2 *or* 11.05 *or* 11.02)

c) $\frac{64}{80}$ = ... (6.4 *or* 0.8 *or* 0.08 *or* 0.008)

d) $1\frac{7}{100}$ = ... (0.17 *or* 1.007 *or* 1.07 *or* 1.7)

3 Approximate each of the following:

..... / 6

a) 788 (to the nearest 10)

b) 16.56 (to the nearest 0.1)

c) $10\frac{2}{5}$ (to the nearest whole number)

d) 1549.7 (to the nearest 1000)

e) 19.75 pounds (to the nearest pound)

f) 3385 m (to the nearest km)

4 Arrange the following numbers in ascending order:

..... / 2

3.25 , 32.5 , 0.325 , 3.52 and 35.2

The order is: ..... , ... , ... , ... and .....

Unit 1 Test (1)

1 Choose the correct answer from those between brackets:

1) The value of the digit (6) in the number 19.56 is ..... . (6 *or* 60 *or* 0.06 *or* 600)

2) $1\frac{3}{4}$ = ... (1.75 *or* 0.75 *or* 0.075 *or* 0.75)

3) 39 ..... 9 + 0.3 (< *or* > *or* = *or* otherwise)

4) 0.4 ..... 0.7 – 0.30 (< *or* > *or* = *or* otherwise)

5) Six and forty three hundredth = ... (64.3 *or* 6.43 *or* 0.643 *or* 6.4)

6) 0.3 + ... = 1 (0.2 *or* 0.07 *or* 0.7 *or* 7)

7) $3\frac{7}{1000}$ = ... (3.7 *or* 3.07 *or* 3.007 *or* 3.0007)

8) 59.9 ≃ 60 to the nearest ..... (hundredth *or* tenth *or* unit *or* $\frac{1}{1000}$)

9) 67 + 100 = ... (6.7 *or* 0.67 *or* 0.76 *or* 670)

2 Complete each of the following:

10) 26.08 ≃ ..... (to the nearest tenth)

11) 251056 ≃ 251100 to the nearest .....

12) 7 + 0.7 + 0.03 + 0.009 = ...

13) The place value of 9 in the number 23.69 is .....

3 Find the result:

14) 95.7 – 62.31 ≃ ..... . (to the nearest $\frac{1}{10}$)

15) 20819 + 10000 ≃ ..... . (to the nearest unit)

Unit 1 Test (2)

1 Choose the correct answer from those between brackets:

1) $354\frac{2}{5} \simeq$ ..... to the nearest whole number. (35.4 or 354 or 355 or 353)

2) The number $\frac{19}{6}$ = ... ($3\frac{1}{2}$ or $3\frac{1}{6}$ or 3.2 or 3.3)

3) The value of the digit(6) in the number 0.46 is ..... (0.06 or 0.6 or 6 or 60)

4) The number 4.7 = 0.7 + ... (4.1 or 7 or 0.1 or 4)

5) Sixty three and two tenths is written as ..... . (6.32 or 63.2 or 6.321 or 3.6)

6) 5.7 + 1.44 ..... 5.7 – 3.4 (< or > or = or otherwise)

7) 23.7 = ... ($\frac{237}{10}$ or $34\frac{7}{10}$ or $2\frac{37}{100}$ or $2\frac{37}{1000}$)

8) 45.26 ≃ 45.3 to the nearest ..... (tenth or unit or ten or hundred)

9) 7.3 + 4.06 = ... (11.36 or 13.3 or 21.36 or 21.9)

2 Complete each of the following:

10) 0.9 ÷ ..... = 1

11) 12.7 + 10.07 = ... ≃ ..... (to the nearest 0.1)

12) 456 + 100 = ... ≃ ..... (to the nearest unit)

13) 4.7 – 2.05 = ...

3 Find the result:

14) If Amr has 533 pounds and his brother has 95.45 pounds. Find the difference between what they have to the nearest pound.

15) Arrange the following numbers in ascending order: 0.35 , 5.4 , $3\frac{1}{2}$, 0.53.

The order is: ..... , ... , ... , ... and .....

Unit (2)

Worksheet 9 — Till Lesson (1) - Unit (2)

..... / 20

1 Complete each of the following: ..... / 5

a) $3\frac{1}{2}$ = ... (in the decimal form)

b) Three and twenty five hundredths = ... (in digits form)

c) 8.21 + 6.24 ≃ ..... (to the nearest tenths)

d) Two squares are congruent if the side length of one of them is equal to ..... .

e) The diagonal of the rectangle divides it into two ..... triangles.

---

2 If the polygon ABCD ≡ the polygon XYZL, complete: ..... / 5

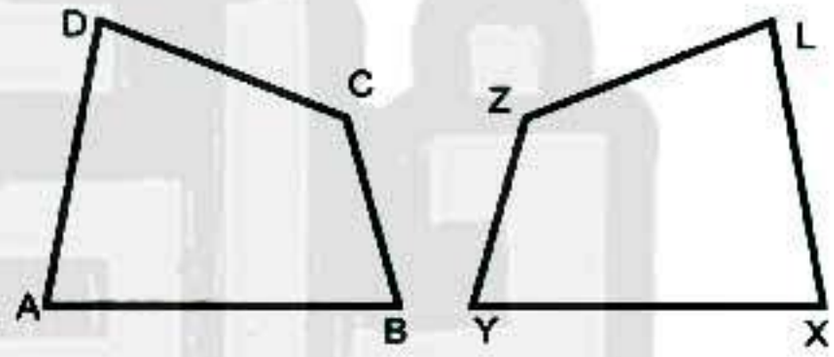
a) $\overline{AB}$ ≡ .....

b) $\overline{BC}$ ≡ .....

c) $\overline{AD}$ ≡ .....

d) m (∠ X) = m (∠.....)

e) m (∠ C) = m (∠.....)



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3 Write the place value of the circled digits: ..... / 4

3.②56 , 53.2⑧ , 7.63② , ⑧.423

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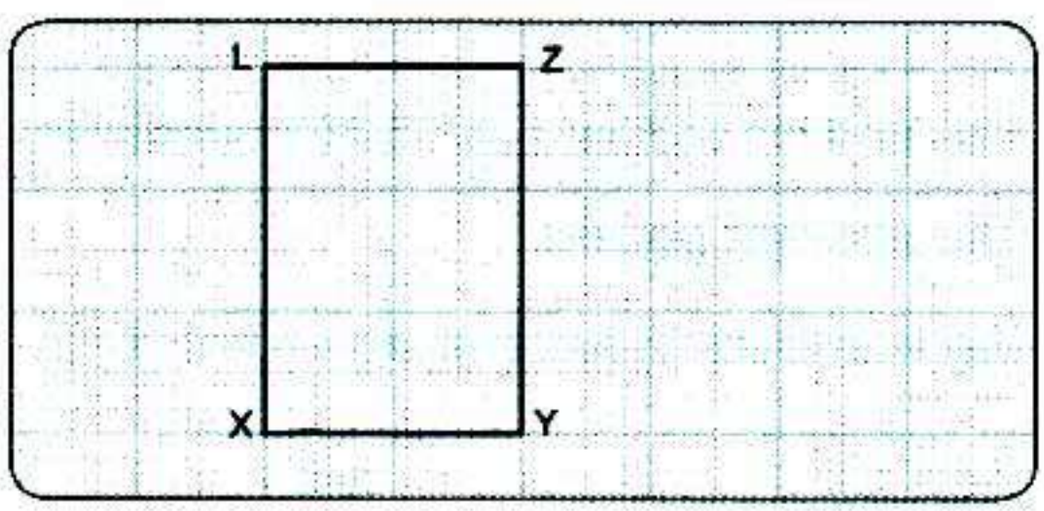
4 Draw the rectangle ABCD to be congruent to the rectangle XYZL. ..... / 6



Worksheet 10 — Till Lesson (2) - Unit (2)

..... / 20

..... / 5

1 Choose the correct answer:

a) 2834.5 ÷ 10 ≃ 280 (to the nearest .....) (unit or 10 or 100 or 1000)

b) The rectangle has ..... line(s) of symmetry. (0 or 1 or 2 or 3)

c) The decimal number ..... lies between 2.8 and 2.9. (2.87 or 2.78 or 2.09 or 2.19)

d) $8\frac{2}{5} = \frac{.....}{.....}$ ($\frac{42}{15}$ or $\frac{10}{15}$ or $\frac{10}{5}$ or $\frac{42}{5}$)

e) The square has ..... line(s) of symmetry. (1 or 2 or 3 or 4)

2 Complete each of the following:

..... / 5

a) 784 + 368 ≃ ..... (to the nearest hundred)

b) A square of side length 9 cm is congruent to another square of perimeter ..... cm.

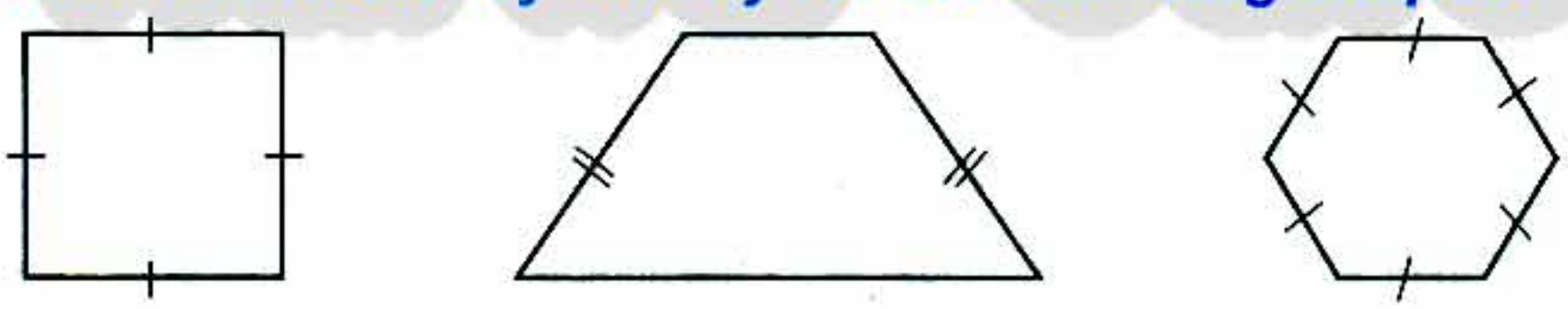
c) The greatest whole number that if approximated to the nearest ten gives 8000 is ..... .

d) 7.583 = 7 + 0.▢ + 0.08 + 0.▢▢▢

e) The isosceles triangle has ..... line(s) of symmetry.

3 Draw all lines of symmetry for the following shapes:

..... / 6

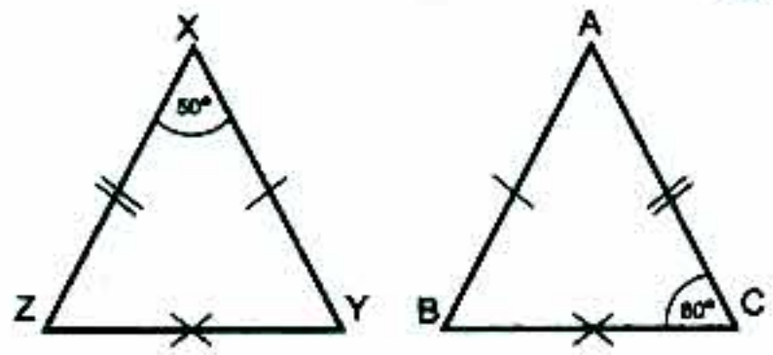


4 In the opposite figures, if △ XYZ ≡ △ ABC, then complete:

..... / 4

a) m (∠A) = ...° **b)** m (∠ Z) = ...°

c) CA = ... **d)** $\overline{ZY}$ ≡ .....



Worksheet 11 till Lesson (3) - Unit (2)

20

1 Choose the correct answer: (5)

a) $45.306 = 45 + 0.3 + 0.\square\square\square$ (6 or 0.6 or 0.06 or 0.006)

b) □ □ □ □ ..... (in the same pattern) (□ or □ or △ or ○)

c) $2.1 <$ ..... < 3 (1.978 or 2.02 or 3.01 or $2\frac{1}{4}$)

d) The value of the digit (5) in the number 17.065 is ..... . (50 or 5 or 0.05 or 0.005)

e) The next term in the pattern A, AB, ABB is ..... (A or AB or ABBB or B)

2 Complete each of the following: (5)

a) 1.5 , 2 , 2.5 , 3 , ... (in the same pattern)

b) 87054 ≃ 87000 (to the nearest .....)

c) The number of lines of symmetry of the square is .....

d) $36.7 = 36 + 0.\square$

e) The next term in the pattern xy, xxyy, xxxyyy is ..... .

3 Put the suitable sign (< , > or =): (5)

a) $\frac{5}{8}$ 0.625

b) 445 ÷ 10 ..... 4450 ÷ 100

c) Twenty nine thousands ..... ninety two thousandths.

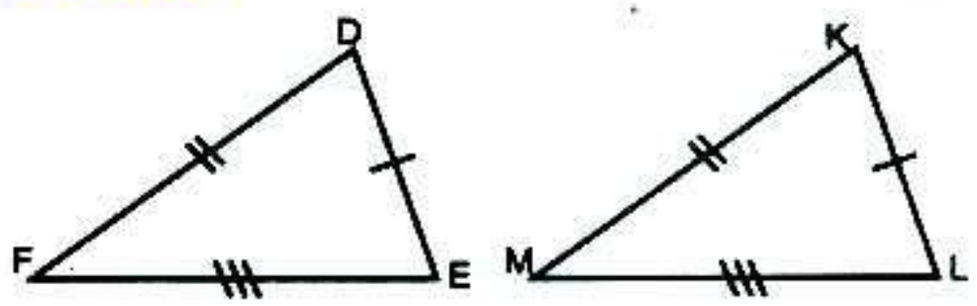
d) The number of lines of symmetry of the rhombus ..... the number of lines of symmetry of the square.

e) $4\frac{1}{6}$ ..... $\frac{25}{6}$

4 In the opposite figures , if Δ DEF ≡ Δ KLM: (5)

Complete (a) $\overline{KL}$ ■ ....., (b) $\overline{DF}$ ■ .....

(c) ∠ E ■ ∠ ..... (d) ∠ F ■ ∠ .....



Unit 2 — Test (1)

1 Choose the correct answer from those between brackets:

1) The equilateral triangle has ..... line(s) of symmetry. (0 or 1 or 2 or 3)

2) The isosceles trapezium has ..... line(s) of symmetry. (0 or 1 or 2 or 3)

3) The rectangle has ..... line(s) of symmetry. (0 or 1 or 2 or 3)

4) If Δ ABC ≡ ΔXYZ, then ∠Y ≡ ∠ ..... . (X or C or B or Y)

5) If the Δ DEF ≡ the ΔXYZ, then EF = ... (XY or YX or YZ or XZ)

6) The number of line(s) of symmetry of the rhombus ..... the number of line(s) of symmetry of the rectangle. (< or > or = or ≤)

7) For the congruency of two triangles their ..... are congruent.
(sides or two angles or two sides or angle and side)

2 Complete each of the following:

8) Two polygons are congruent if their corresponding sides and their corresponding angles are ..... .

9) The number of lines of symmetry of the scalene Δ is ..... .

10) Two polygons are congruent if their corresponding sides are ..... in length and their corresponding angles are ..... in measure.

11) The diagonal in the parallelogram divides it in two ..... triangles.

3 Find the result:

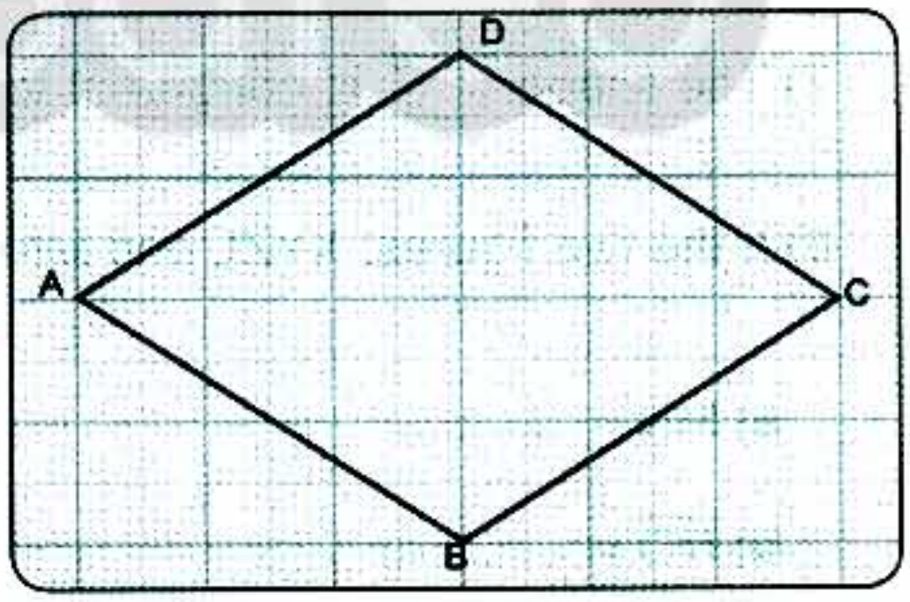
12) From the opposite figure:

a) What is the figure ABCD called? .....

b) How many lines of symmetry does the opposite figure have?

c) Complete: AB = ... = ... = ...

$\overline{BD}$ ..... $\overline{AC}$ and $\overleftrightarrow{BD}$ ..... $\overleftrightarrow{AC}$



13) From the opposite figure:

a) What is the name of the figure XYZL?

b) Draw a line to divide the figure into two congruent parts.

c) How many lines of symmetry does the figure XYZL have?

Unit 2

Test (2)

1 Choose the correct answer from those between brackets:

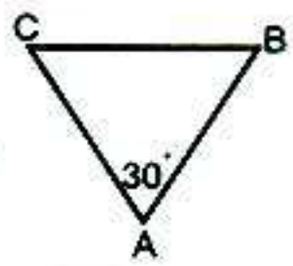
1) If Δ ABC ≡ ΔXYZ, then AB – XY = ... (AB or XY or BA or Zero)

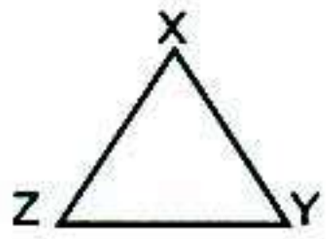
2) The square has ..... line(s) of symmetry. (1 or 2 or 3 or 4)

3) The isosceles Δ has ..... line(s) of symmetry. (0 or 1 or 2 or 3)

4) In the opposite figures: Δ ABC ≡ ΔXYZ, then m(∠X) = ... °

(30 or 40 or 50 or 60)

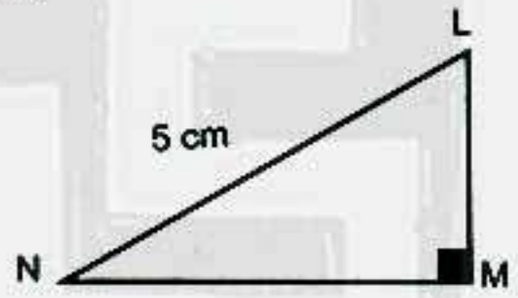


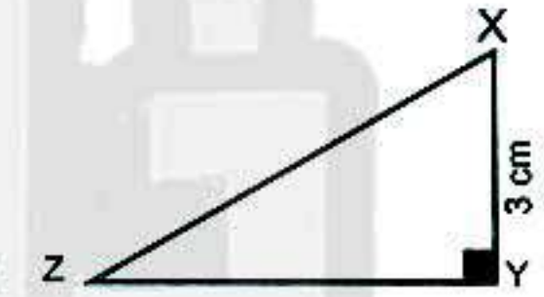


5) In the opposite figure: Δ XYZ ≡ Δ LMN, then:

LM = ...cm (3 or 5 or 4 or 0)

XZ = ... cm (3 or 5 or 4 or 0)





6) The number of axes of symmetry of the parallelogram is ..... . (0 or 1 or 2 or 3)

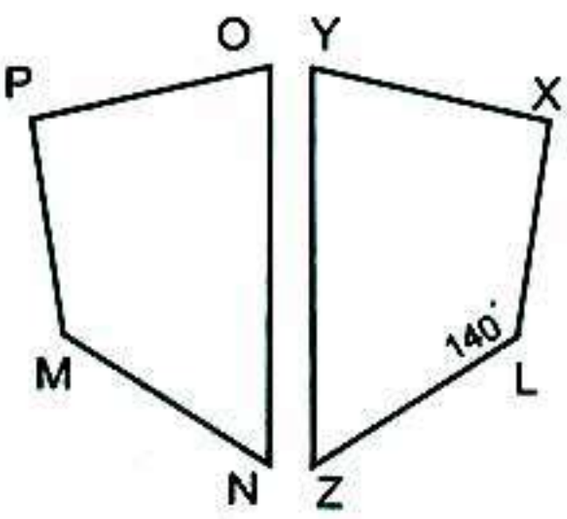
7) The shape ▱ is congruent to ..... . (□ or □ or △ or ▱)

8) If the two figures: XYZL and MNOP are ≡ , then complete:

a) MN = ...

b) $\overline{NO}$ ≡ .....

c) m (∠ P) ≡ ..... °



2 Complete each of the following:

9) If the two polygons XYZLM and ABCDE are congruent and ZL = 3.5 cm, then ..... = 3.5 cm

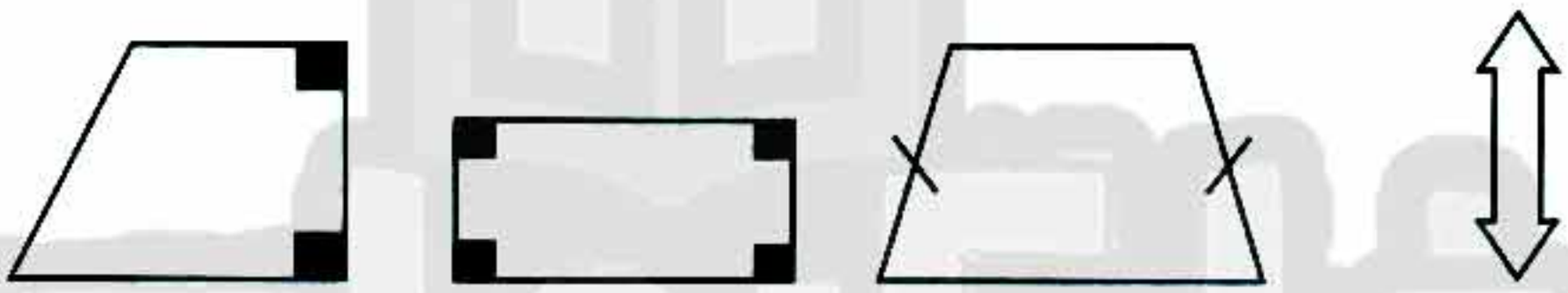
10) The equilateral Δ has ..... line(s) of symmetry.

11) The parallelogram has ..... line(s) of symmetry.

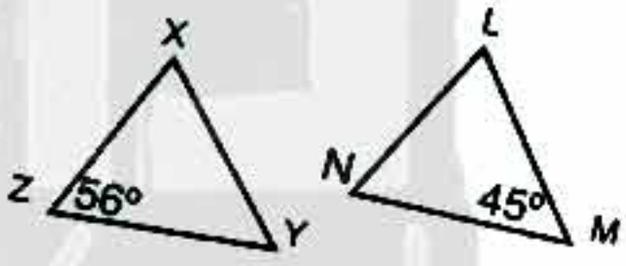
12) The equality of the corresponding sides lengths of two triangles is enough to consider them ..... .

3 Find the result:

13) In each of the following figures draw all the line of symmetry if it exists.



14) In the opposite figures: Δ LMN ≡ ΔXYZ, then complete:



a) $\overline{XZ}$ ≡ .....

b) ∠L ≡ ∠ .....

c) m (∠Y) = m (∠.....) = ...°

d) m (∠X) = ... °

Unit (3)

Worksheet 12 — Till Lesson (1) - Unit (3)

..... / 20 ..... / 5

1 Choose the correct answer:

a) $5\frac{7}{100}$ = ... (5.7 or 5.07 or 5.007 or 7.05)

b) $4\frac{7}{10} + 3.07$ = ... (7.14 or 7.4 or 7.77 or 10.14)

c) The isosceles triangle has ..... line(s) of symmetry. (1 or 2 or 3 or 4)

d) 6.5 litres = ... mL. (65 or 605 or 650 or 6500)

e) 500 mL = ... litre. ($\frac{1}{2}$ or $\frac{1}{3}$ or $\frac{1}{4}$ or 1)

---

2 Complete each of the following:

..... / 5

a) 14.201 + 9.315 = ... ≃ ..... (to the nearest tenth)

b) 2 dm^3 = ... litres.

c) $2\frac{2}{9} + 3\frac{1}{5}$ = ...

d) 75 ÷ 1000 = ...

e) 90 litres = ... mL.

---

3 Put the suitable sign (< , > or =):

..... / 5

a) 25.6 ..... 256 ÷ 100

b) $\frac{8}{9}$ 1

c) $\frac{3}{4}$ litre ..... 750 dm^3

d) 3.13+ 2 ..... 5.131

e) 1.25 litres ..... 125 millilitres

---

4 Arrange the following capacities in ascending order:

..... / 5

750 mL, $\frac{1}{2}$ L, 2 dm^3 and 1250 mL

The order is: ..... , ... , ... and .....

Worksheet 13 — Till Lesson (2) - Unit (3)

..... / 20

1 Complete each of the following: ..... / 5

a) $\frac{9}{2}$ = ... (in mixed form).

b) The place value of the digit 9 in 3.159 is .....

c) $13\frac{1}{5}$ = ... (in decimal form).

d) 2 kg = ... gm.

e) The parallelogram has ..... line(s) of symmetry.

2 Choose the correct answer: ..... / 5

a) $7\frac{1}{3}$ as an improper fraction is ..... . ($3\frac{1}{7}$ or $\frac{7}{3}$ or $\frac{11}{3}$ or $\frac{22}{3}$)

b) 40 litres = ... mL. (4000 or 40000 or 40 or 0.04)

c) ..... kg = 3000 gm. (3 or 30 or 300 or $\frac{7}{3}$)

d) The weight of a rabbit is ..... . (3 tons or 3 kg or 30 kg or 30 gm)

e) The rectangle has ..... line(s) of symmetry. (1 or 2 or 3 or 4)

3 Find the result of the following: ..... / 6

a) $3\frac{3}{4}$ kg + 250 gm = ... kg.

b) $\frac{1}{2}$ litre + $\frac{3}{4}$ dm^3 = ... litre(s).

c) $1\frac{1}{4}$ ton + 750 kg = ... tons.

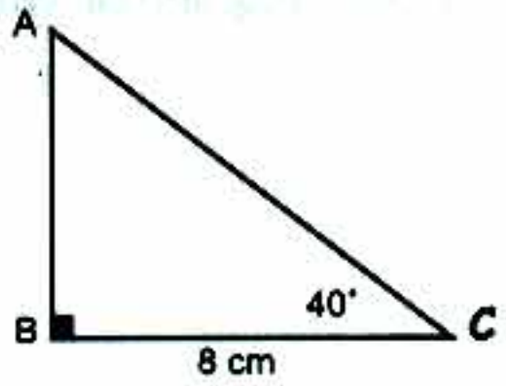
4 If △ ABC ≡ △ DEF, then complete: ..... / 4

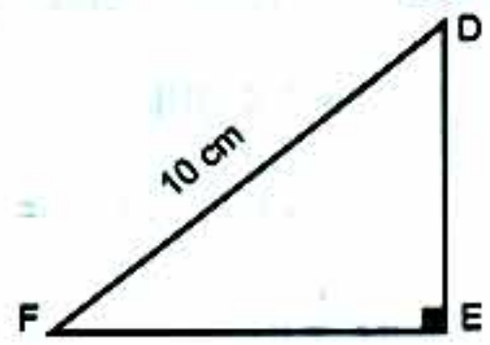
a) FE = ... cm

b) ∠ B ≡ ∠ .....

c) $\overline{AB}$ ≡ .....

d) m (∠ D) = m (∠.....) = ...°





Worksheet 14 — Till Lesson (3) - Unit (3)

..... / 25

..... / 5

1 Complete each of the following:

a) 5000 mL = ... litres

b) 3000 kg = ... tons.

c) $\frac{1}{3}$ of a day = ... hours.

d) 500 mL = ... litres.

e) 120 seconds = ... minutes.

---

2 Choose the correct answer:

..... / 5

a) $\frac{1}{4}$ of a kilogram and 375 grams = ... grams. (625 or 400 or 380 or 250.25)

b) 250 tons = ... kg. (0.25 or 2500 or 25000 or 250000)

c) 3 hours = ... minutes. (36 or 72 or 108 or 180)

d) 20 litres = ... mL. (20000 or 2000 or 200 or 0.02)

e) 3600 seconds = ... hour(s). (2 or 1 or 15 or 0.5)

---

3 Put the suitable sign (< , > or =):

..... / 5

a) 6205 kg ..... $6\frac{1}{4}$ tons.

b) $2\frac{1}{2}$ litres ..... 2050 mL.

c) 72 hours ..... three days.

d) 750 gm ..... $\frac{1}{2}$ kg.

e) $\frac{1}{4}$ litre ..... 1500 mL.

---

4 Arrange each of the following in ascending order:

..... / 6

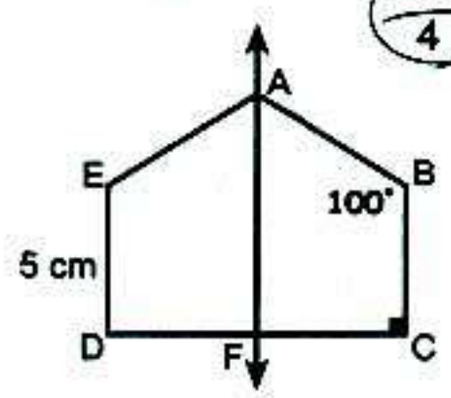
a) 1 week , $\frac{1}{2}$ a day , 3600 seconds , 20 minutes and 72 days

b) $\frac{1}{2}$ ton , 400000 gm , 700 kg , 875 kg and $\frac{1}{4}$ ton

---

5 In the opposite figure, if $\overleftrightarrow{AF}$ is a line of symmetry of the polygon ABCDE, then complete:

..... / 4



a) m (∠ D) = ...°

b) m (∠ E) = ...°

c) $\overline{BC}$ ≡ .....

d) $\overline{DF}$ ≡ .....

Unit 3 — Test (1)

1 Choose the correct answer from those between brackets:

1) The measuring unit of capacity is ..... . (kg or hour or litre)

2) $2\frac{1}{2}$ kg ..... 2500 gm. (> or < or =)

3) 2 days = ... hours. (48 or 72 or 96)

4) 39 days = ... (to the nearest week) (5 or 6 or 7)

5) The unit of measuring time is ..... (m or day or gm or litre)

6) 1 L = ... mL (1000 or 10 or 10 000 or 100)

7) 4.5 tons = ... kg (45 or 54 or 4500 or 5400)

8) 5 litres = ... cm^3 (50 or 500 or 5000 or 5500)

9) 750 grams = ... $\frac{1}{2}$ kg (> or < or = or otherwise)

2 Complete each of the following:

10) 72 hours ..... 3 days (put < or > or =)

11) $\frac{1}{4}$ of a day = ... hours.

12) 2 tons = ... grams

13) $\frac{1}{4}$ litres = ... millilitres

14) 35 dm^3 = ... mL

15) 54 hours = ... $\frac{\text{.....}}{\text{.....}}$ days (mixed number)

3 Find the result:

16) **Arrange the following in descending order:** 8 L, 9000 mL , 5 dm^3 and 6500 cm^3

The order is: ..... , ... , ... and .....

17) **Arrange the following in ascending order:** 10 hours, $\frac{1}{2}$ day , 20 minutes

The order is: ..... , ... and .....

18) **Put the suitable sign (< or = or >):**

(1) One day ..... 15 hours.

(2) 200 millilitres ..... 2 litres.

(3) 4 pounds ..... 375 piastres.

Unit 3 — Test (2)

1 Choose the correct answer from those between brackets:

1) 3 litres ..... 3000 dm^3 (> or < or =)

2) Two and half hours ..... 150 minutes. (> or < or =)

3) 2000 millilitres ..... 2000 centimetres (> or < or =)

4) 520 kg ..... 5000 gm (> or < or =)

5) 4 750 millilitres = ... (475 litres or $45\frac{1}{2}$ litres or $4\frac{3}{4}$ litres)

6) $\frac{2}{3}$ of a day = ... hours. (16 or 15 or 6 or 18)

7) 14 days and 4 weeks = ... weeks. (4 or 5 or 6)

8) 3750 cm = ... metres. (3.75 or 373 or 375000 or 37.5)

9) The litre is the capacity of a vessel in the shape of a cube with edge length .....
(1 cm or 10 cm or 100 cm or 1 dcm^3)

2 Complete each of the following:

10) 25 days ≃ ..... weeks

11) 2345 grams ≃ ..... kilograms

12) $\frac{1}{2}$ litre = ... cm^3

13) One minute = ... seconds

14) $\frac{1}{2}$ km = ... metres

15) The litre = ... millilitres

3 Find the result:

16) **Arrange the following in ascending order:**

4 litres, 5200 millilitres , 4.5 dm^3 and 4700 millilitres

The order is: ..... , ... , ... , ...

17) **Arrange ascendingly:** a kilogram, a ton and a gram

The order is: ..... , ... , ...

16) **Arrange the following in ascending order:** 8740 kilograms, 9 tons and 8740 grams

The order is: ..... , ... , ...